

A USTRALIAN MUTUAL GOLD MINING ASSOCIATION.—The Managing Committee have much pleasure in communicating to their co-adventurers the following extracts from the REPORT of the MEETING of SHARE-HOLDERS, held at the offices of the Association, No. 433, George-street, Sydney, on Saturday, the 13th of November, 1852; showing the position of the Company at that time—viz.:

1. "The extensive works commenced in August last for draining Erskine Island, on the Turon, and which have incessantly occupied the whole staff during a very wet season, are nearly completed; and the engineer reports that coarse gold in the alluvium has been reached, and with moderate weather the returns henceforward will be large and certain. This island, which has been granted to the company, contains an area of about 12 acres of auriferous deposit, and half a mile of the richest bed claims in the river."

2. "The driving a tunnel through Lucky Point, which has been commenced by wealthy contractors, with a penalty of £2000 unless completed in three months, will, it is believed, effectually drain the whole of that celebrated peninsula, whereby the bed claims belonging to this company, and extending over 324 feet, will be speedily workable. These claims lie on both sides of those worked last year, respectively by Messrs. West and Want, and which severally produced 34 ozs. daily."

3. "The other properties on the Turon—viz., Chapel Flat, Little Oakley Creek, Green Island, Erskine Flat, and the Quartz Vein and Race near Paterson's Point, will be worked whenever the Committee of Management shall deem it most advisable. The company, therefore, stands in a very favourable position. Their staff of 23 experienced miners and ore-washers are bound for 12 months, at very reasonable wages, and are giving every satisfaction to their employers; and the season of the year is the most propitious for reaching the rich auriferous deposits of the Turon."

"In conclusion, your Directors trust that the shareholders will continue to have confidence in an undertaking which, free from liability, offers prospects of certain and permanent success."

"Proposed by the Rev. Thomas Aitken, seconded by Samuel Burleigh, Esq., and unanimously carried. 'That the Report of the Directors be received and adopted.'"

The Committee beg to add, that a copy of the Report may be seen at the offices of the Association, No. 1, Moorgate, London.

By order of the Board, JAMES DULLING, Purser.

MOUNT CARBON CHARTERED COAL AND IRON COMPANY, FAYETTE COUNTY, VIRGINIA, U. S.

The company being incorporated by Charter from the State Legislature, no liability will be attached to the shareholders beyond the amount of shares.

Capital £150,000, in 150,000 parts of £1 each; to be paid in full on allotment, without further call or liability.

DIRECTORS.

SAMUEL HINDS, Esq., 61, Portland-place
J. C. H. COUQUHOUN, Esq., 32, York-street, Portland-place
GERARD RALSTON, Esq., 31, Tokenhouse-yard, Lombury
GEORGE GRIFFIN, Esq., Beale's Wharf, Southwark
JOSEPH LAURIE, Esq., Portland-square
GEORGE J. BURSLEM, Esq., Harwood Lodge, Newbury, Berks
W. T. POUSIN, Esq., late Ambassador to America, 42, Rue Richer, Paris
JOHN Y. CLARKE, Esq., 39, Rue d'Amsterdam, Paris

SOLICITORS.—Messrs. King and Attwells; F. Truefitt, Esq., 21, Earl-street, Blackfriars.
BROKERS.—Messrs. Eykyn Brothers, 22, Change-alley, Cornhill; John G. Bone, Esq., 5, Bank Chambers, Lombury.

BANKERS in LONDON.—Commercial Bank of London, Lombury.
BANKERS in PARIS.—Messrs. Livingston, Wells, and Co., 8, Place de la Bourse.
SECRETARY pro tem.—Mr. W. A. Hooper.
OFFICES.—30, BUCKLERSBURY.

PROSPECTUS.

The object of this company is the working of a large tract of coal land in Virginia (10,000 acres), near the Kanawha River, a navigable tributary of the Ohio, and convenient to all the great western markets.

A charter has been obtained from the Virginia State Legislature for working this company, and the lands purchased in "fee simple," so that no liability will be attached to shareholders beyond the amount of subscribed shares.

This estate lies upon the slope of an elevated ridge, on the right or east side of Armstrong's Creek, a navigable tributary of the Great Kanawha River, and upon the route of the Virginia Central Railroad, which affords an outlet to the Atlantic cities.

Its distance from the Kanawha River is one mile and a quarter, and its frontage upon the creek is about nine miles. The creek bottoms are level, and offer no obstruction to a railway, which can be built at a small expense.

The tract contains inexhaustible deposits of splint coal, common bituminous, and of Cannel coal, in 16 seams of from 3 to 8 feet thickness, the entire average being more than 70 feet of workable coal. These are entirely above water level. They lie nearly horizontally, dipping about 30 feet per mile towards the creek, enough to afford a natural drainage—consequently will require no machinery for pumping. The coal measures, or seams, of this region are not subject to "faults," and the several seams upon this tract, cropping out upon the slopes, may be traced along the whole front.

The seams of splint coal are from 6 to 8 feet thick. The coal is the best known in the western markets for the use of steamers, for foundries, and for furnaces. It is of high heating power, of great purity and freedom from earthy matter, of little tendency to caking, is extremely hard and compact, and, for this reason, and its freedom from sulphur, beyond danger of spontaneous combustion, to which many other coals are liable.

The Cannel coal is of the best quality, equal in every respect to the finest British Cannel. It is found in a seam 3½ feet thick, which has been opened, and computed to contain many thousands of tons.

The only Cannel coal of good quality known in the United States is found in the Valley of the Kanawha, and at different points this same seam is actively mined by companies that have met with great success, although under disadvantages of position as compared with this tract.

Besides those large quantities of coal that are known to exist, iron ore abounds, and the increasing demand and high prices of iron at the present time would alone justify the working of a company with a certain and profitable return. The tract is well timbered, and a great portion finely suited for agricultural purposes. The State is one of the healthiest in the Union, and most conveniently situated to the great western markets.

In all instances where coal mining has been carried on to any extent, the lands have very much enhanced in value, both for agricultural and mining purposes. The Company holding the Mount Carbon estate in "fee simple" are in a position to dispose of portions of the property, as it increases in value, to other parties or companies.

The quantity of workable coal above water level on this property is estimated by Prof. Ansted (who has recently returned from a special mission to the district) at 55,000 tons per acre, and on the 10,000 acres the enormous quantity of 550,000,000 tons. A very large and extended system of working may safely be ventured on in a case where the mineral property is so clearly developed and readily obtained, and where the quantity of mineral in sight is so exceedingly large.

These coals will find ready markets at Cincinnati, Louisville, New Orleans, and other large cities and towns on the Ohio and Mississippi Rivers; also at depots already established, or to be established, by the company, to supply steam-boats, of which nearly 400 pass weekly on the Ohio, and nearly as many more on the Mississippi. The cost of carrying these coals to New Orleans, which is now the great *entre-voie* for an immense number of vessels in the trade for supplying coals to the Australian packet stations, and also the Pacific steam companies, is but trifling, and the increase of steam navigation on the Pacific warrants an immense consumption, and likewise a high price for years to come. (See Professor Ansted's report, markets, &c.)

The estimated cost of working these mines, and carrying the coal to market, has been carefully calculated by Professor Ansted. The calculation is based on a high rate of wages and advanced prices of some articles, with the following result:—

Dead work and loss in mine per ton of 28 bushels 4 Cents.
Getting and hauling coal to day 50 "
Conveying to river and putting on board 12 "
Oil, lights, and sundry small charges 4½ Cents.

To this must be added for all coal conveyed to a distance, the proportion of cost of boat and tolls on the Kanawha (say, 40 cents per ton), and a charge for commission, depots, wharfage, or storing, which may be taken at 10 cents. The total charge to be added for wages and further expenses of transport may be taken at 4 cents per ton for every 100 miles conveyed. This would amount to 12 cents per ton at Cincinnati, 18 cents at Louisville, and 30 cents at New Orleans. Thus the net cost of the coal as put on board being 70 cents, or 3½ per ton, the total cost when stored at Cincinnati, adding one-tenth for risk of loss by river transportation, would be in English money 6s. 2d. per ton, in Louisville 6s. 4d., and in New Orleans 9s. 2d. per ton, the average market selling price being more than 100 per cent. advance. The different markets for the Mount Carbon Coal are fully detailed in Prof. Ansted's report, of which the following is an extract:—

"It may be well to say a few words as to the probable per cent to be derived from any given amount of capital in working this property, yet it is difficult to do so without appearing to be extravagant. Assuming, however, a capital of £200,000 available for plant, necessary outlay, and working capital, there can be no reason why a business of at least 200,000 tons per annum should not be established. At the average prices of good coal in ordinary seasons (say 9s. per ton) at Cincinnati, any quantity sold there would yield a net profit of 2s. 7d. per ton, while that sold at New Orleans at 20s. per ton would give a profit of 10s. 4d. per ton. The sale at intermediate points would, of course, be made at prices having reference to distance, but the profits would increase with the distance in something like a direct ratio. If, therefore, we assume the sales to be as follows, the profits may readily be calculated in the general way, and the result will thus appear:—

At Cincinnati and for depots not lower down Tons. s. d. £ s. d.
At that city 60,000 2 7 7 per ton 10,333 13 4

At various towns and for river navigation below Cincinnati 80,000 5 0 0 20,000 0 0
At New Orleans 40,000 10 4 0 20,666 13 4

Tons of coal 200,000 giving a profit of £25,100 6 0
Being at the rate of 25 per cent. on the capital. The above only affords a glimpse of the prospects of success fairly in view."

1. There is a large tract of nearly horizontal coal-bearing deposits of unusual regularity, great thickness, and excellent quality, near a navigable stream.

2. From this tract is a straight course of 2000 miles of river navigation, and numerous large towns on the river banks, from which proceed very important and extensive rail-ways, tending to open a communication with other towns, some of them of the largest magnitude.

3. Not only does the tract generally contain coal, but the particular property before us has the great advantage of being conveniently situated for working several valuable beds above the water-line, and the coal is proved both at the water's edge and at various heights on the hill-side.

4. There is a large natural market very insufficiently provided for, but constantly increasing in extent, the present supply being variable, and usually commanding high prices. More than this ought not to be needed to secure the employment of capital in this direction, and it would be difficult to set a limit to the amount that could be invested with advantage.

The Mount Carbon estate is so situated as to require only one and a quarter miles of railroad to connect with the Great Central railroad or the river, and the cost in getting coal to market, owing to the convenient location, will be much less than many other mines. The company being incorporated by Charter of the Virginia State Legislature, the English Joint-Stock Act does not apply, and as the scrip will be payable to bearer, no deed is required to be signed.

FORM OF APPLICATION FOR SHARES.

To the directors of the Mount Carbon Chartered Coal and Iron Company, 30, Bucklersbury.

Gentlemen,—I request that you will allot me shares of £1 each, in the above company, and I hereby agree to accept the same, or any less number you may allot me, and pay the sum of £1 per share thereon when required.

Reference Name in full
Signature Residence
Date Business or profession

COPPER AND GENERAL MINING COMPANY OF NELSON, NEW ZEALAND.—(Provisionally registered.) Capital £50,000, in shares of £1 each, all paid up.—A limited number only will be offered for sale in this country.

DIRECTOR OF THE MINES AT NELSON.—W. L. WREY, Esq., Government Geologist.

ACCOUNTANT AND SECRETARY.—Mr. L. H. Burman.

INSPECTORS OF WORKS.—Mr. John Hare, and Mr. Hatton E. Bott.

ASSAYISTS IN LONDON.—Percival Johnson and Co., Hatton Garden.

BROKERS.—Joseph Davis, Esq., 75, Old Broad-street Chambers, City.

AGENT IN LONDON.—Mr. Joseph Stayner, 116, Fenchurch-street; at whose offices forms of application and prospectuses can be obtained, which, to avoid trouble, can only be had on payment of 5s., to meet the preliminary expenses, and no other application than the printed form will have attention.

Science has long determined that the province of Nelson, New Zealand, was not only an extensive mineral country, but that its eastern ranges were the depositaries of rich mineral and metallic ores; among these may be enumerated gold, silver, lead, copper, and coal. This has now been confirmed by the investigations of W. L. Wrey, Esq., whose report was published in the *Gazette of the Colony* by order of the Governor, Sir George Grey; and, subsequently, by a special committee, composed of the Hon. Mr. Stafford, Dr. Monroe, Mr. Travers, Mr. Wells, W. L. Wrey, Esq., Government Geologist (accompanied by the Hon. Mr. Dillon, Crown Commissioner), and Mr. Brunner, Crown Surveyor, whose report will be found in the *Australian and New Zealand Gazette* of the 5th March, 1853.

The copper in particular presents itself in such masses as to require no mining, but simply cutting and removing the ore products to the smelting-works; this is found to average 30 per cent. It is intended to limit the operations of this company entirely to mining, and whatever is required is the pursuit of mining and the use of the ore.

The directors intend to contract with a smelting company in London, to undertake the reduction of its ores on the spot, where every convenience offers for the process being carried on with the greatest economy and convenience: thus the necessity of exporting the ores in their crude state will be avoided, and prove advantageous, by enabling the company's officers to personally inspect the reduction of their ores. The working capital of the company is small, compared with the magnitude of the undertaking. No doubt whatever is entertained but that the amount suggested is equal to every requirement, inasmuch as the *Burra Burra*, of South Australia, commenced with only a capital of £12,000. The profits realised from some of the richest copper mines by expensive machinery give the following results:—

Subscribed. Dividend in 1853. Present price.

Devon Great Consols	£ 1 0 0	per share.	£304 per share.	£ 450 each.
Wheat Buller	5 0 0	"	242 "	1200 "
United Mines	40 0 0	"	400 "	
Wheat Bassett	10 5 0	"	370 "	600 "
South Cadron	2 10 0	"	—	220 "
Phoenix	30 0 0	"	—	750 "

Burra Burra Mine, of South Australia, has given a return much greater than any gold mine ever yet formed:—viz.:

In June, 1847	50 per cent. dividend.
In July, "	50 "
In Aug., "	100 "
In Dec., "	200 "

In 1848, three dividends of 200 per cent. each, so that in 15 months this mine gave dividends equal to 1000 per cent. on the subscribed capital. The prosperity of this mine has only been slightly interrupted by the absence of sufficient labour to the more attractive gold diggings of Victoria.

This company will conduct its works by the aid of a few Cornish miners superintending the native labour, which can be obtained in the settlement at rates not exceeding 2s. 6d. per day.

It is manifest, from the reports of Mr. Wrey and the special committee, that no delay or expenditure is required to prove the mines, or to purchase machinery, but simply to provide the funds for sending out a skilful mining captain, engineer, and an efficient staff of miners to conduct the works, and to erect the buildings necessary for their comfort, and the protection of the property.

The *Burra Burra* had to cart their fuel, stores, and men, and bring their ores 95 miles to a place of shipment, when they made the dividend; whereas these workings are within eight miles of the port of Nelson, from whence they draw all their supplies, having also an abundant supply of water for the mines, and the means of transporting the produce to the market.

The celebrated coal-fields of Takakau, lately secured by Government purchase from the natives, are immediately connected with this district, where wood, stone, and bricks are plentiful, and lime-works in full operation—in the former the company have already secured 150 acres of freehold land.

N. B.—Since this prospectus was prepared, the *Times*, on the 11th March inst., gives further details respecting these discoveries.

Extract from a Letter, W. L. Wrey, Esq., to His Honour the Superintendent of the Nelson Settlement in New Zealand, dated 25th May, 1852.

I have very great pleasure in being able to report to you, that I believe the copper lode of this district to contain very rich metal in very great abundance; and I can add, I never saw any lode, anywhere, present such decided appearance of metal as its outcrop has at this spot; and the only real expense required is, in laying out with skill, the line of transport to a shipping place. Pumps or steam machinery are not necessary here.

The following extract is copied from the *Nelson Examiner*, of July 14th, 1852.

We learn from Mr. Wrey himself, that he never saw such strong indications of mineral wealth as in the locality of the Nelson Mines. He is persuaded that the copper ores are likely to prove richer and of greater abundance than at the *Burra Burra* of South Australia. Mr. Wrey is of opinion, that these mines could be most safely and profitably worked by a company, as other minerals, besides copper, are to be obtained, which would not only confer advantages on the colony as well as individual shareholders.

Extracts from the Superintendent of Military Roads, enclosed in Governor Grey's despatch to Earl Grey, on the subject of employing the natives of New Zealand upon great public works, and their aptitude for the service, reporting the success that has attended the attempt.

Wellington, New Zealand, June 24, 1847.—SIR: A year having elapsed since you were pleased to direct the employment of natives upon the military roads, under my superintendence, I now submit the result to your Excellency's consideration. In the course of the year about 350 natives have been employed at the rate of 2s. 6d. per diem; during this time they have taken part in every operation, such as bridge-making, sloping, draining, filling, and metalling, they have cut seven miles of road out of steep hills and precipices, completing the whole to my satisfaction. You will perceive that the wages paid to the natives have been little more than half those of European workmen, and the amount of labour exceeds what the same number of soldiers would have performed in the time, &c.

C. HAMILTON RUSSELL, Captain 58th Regiment, Superintendent Military Roads.

Extract from Capt. Russell's report to Sir George Grey, forwarded to Earl Grey, Wellington, January 1, 1848.—In disposition the natives appear cheerful and singularly free from the vice of drunkenness, so much so, as to enable me to repeat the assurance lately given to your Excellency, that not a case has ever yet come under the observation of either myself or the superintendents of the majority, who are strict in their religious observances, nothing being allowed to interfere with their morning and evening worship. Their capacity as workmen is best shown by the works which they have executed; the only European labour which has been used in the construction of bridges, &c., on the greater part of the line, being that of a foreman, who instructed them. From such material, I conceive, an artificer corps might be formed peculiarly valuable to this country, affording a command of labour in any desired locality, admirably adapted to New Zealand, &c.

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By order, W. L. Wrey, Esq.

W. L. Wrey, Esq., to His Honour the Superintendent of Military Roads, dated 22, August 1853.

FORM OF APPLICATION FOR SHARES.

To the Committee of Management of the Copper and General Mining Company of Nelson, New Zealand.

GENTLEMEN,—I request you will allot me

Original Correspondence.

MINING LAWS.

SIR.—In my letter inserted in your Journal of the 12th inst., I directed attention to the 7th and 8th Vic., cap. 110, and to the 11th and 12th Vic., p. 45, as evidence that adventurers were entitled to conduct mining operations upon the Cost-book System out of the jurisdiction of the Court of Star Chamber, and that companies so formed are not illegal. Your article of the 19th inst. on Mr. Higgins's pamphlet induces me to return to the subject, and enquire whether that gentleman, the writer of the City Article in the *Times*, or any of your numerous readers can refer to a single case, either at law or equity, where a decision has been given at all calculated to support the views of the learned writer of *The Gold Companies, and the Cost-book System*? I have searched carefully, but without being able to find one, and shall feel obliged by any information they can afford me.

You have alluded to the decision of Vice-Chancellor Stuart, as to the right of a shareholder to determine and put an end to his liability by relinquishing his shares; and, as the question is of great importance to the mining world, I have obtained the facts of the case referred to, which are as follows.—A company was formed to work a lead mine in Merioneth, N.W. The prospectus stated it was "formed upon the Cost-book Principle," and in addition to setting forth the promising character of the speculation, it contained "rules and regulations" under which the operations were to be conducted. The 24th rule was, "That any shareholder may determine his or her responsibility or liability with respect to the affairs of these mines, upon his or her giving notice in writing to the purser of the company for the time being, of his or her desire of retiring from the company, and also upon depositing with the said purser the transfer of the share or shares held by him or her, and signing a relinquishment of all claims or demands on the company, in respect of such share or shares." A became a holder of 90 shares, and paid all calls made thereon; he never attended any meeting, or signed the cost-book. Considerable progress was made in developing the mine, until from the non-payment of calls by some of the shareholders, and there being no remedy to enforce payment thereof, the company fell into difficulties, and A, without ascertaining and paying his proportion of the outstanding liabilities, relinquished all his share, under the rule above-mentioned. Actions were at this time commenced by creditors against the directors, who (finding many other shareholders following the example of A) immediately petitioned under the Joint-Stock Companies' Winding-up Acts, 1848 and 1849, and obtained an order for the dissolution and winding-up of the affairs of the company. Under these circumstances, A was placed on the list of contributors by the official manager (as liable to contribute towards the debts due by the company at the time he relinquished his share), and he was settled thereon by the Master in Chancery, to whom the winding-up had been referred. Upon appeal against the decision of the Master, Vice-Chancellor Stuart decided that A was not a contributory, inasmuch as having paid all calls, he was entitled to determine and put an end to his liability in the way pointed out by the rules and regulations of the company. The case was then taken by the official manager before the Lord Justices (Lord Cranworth and Sir J. L. Knight Bruce), who discharged the order of Vice-Chancellor Stuart, and sent the matter back to the Master to be reheard, the parties being unable to agree as to the facts. I will watch the proceedings, as I think it desirable that the result should be made known through your columns. The question appears to me to be simply this—can A, when the partnership is in difficulties, relieve himself from liability to contribute to the then existing debts by relinquishing his share? The right to determine his liability cannot, and I believe it is not, questioned. Mr. Collier, in his *Treatise on the Law relating to Mines*, says (p. 93-4) "It is understood that any adventurer may relinquish his share, and with it his liabilities, at least as far as his partners are concerned, by giving notice of relinquishment in writing to the purser, and settling his account with the mine."

I have heard it stated by an eminent barrister, that the essence of the Cost-book System is, that no debt can be incurred by the company; that the principle is to work with funds previously provided by a call; that any other mode of proceeding is contrary to the Cost-book System, and at once brings the company within the Joint-Stock Companies' Registration Act: in fact, it is impossible to state the various conflicting opinions on the matter, and it is a source of great satisfaction to learn that the ability and experience of Mr. Collier will be forthwith directed to the introduction of a legislative enactment, whereby it is to be hoped all doubts, dangers, and difficulties will be removed. Now is the time for your correspondents, Mr. Seymour Smith, "K. Q. X. Gnome," "T. T.," and others to "speak out," so that no point may be overlooked: "Where no counsellor, the people fall; but in the multitude of counsellors there is safety."

London, March 21.

R. P. H.

MR. BLACKWELL ON THE BLAST-FURNACE.

SIR.—I have been looking with considerable interest for the discussion on Mr. Blackwell's paper, read at the Birmingham Institute of Mechanical Engineers, and now that it is printed beg to offer a few remarks. I should have been glad if Mr. Blackwell had stated whence he derived the hint for the experiments made in Derbyshire on the best arrangement for filling the blast-furnace. I always like to trace improvements to their origin. I never saw this advantageous plan referred to in public, until I gave in your columns a statement of its effects in January, 1847; and I never saw it used, except where immediately derived from the furnace managers, from whom I stated, in a subsequent letter, I had myself obtained it. I wish, therefore, Mr. Blackwell had named how he learned the process. I had some correspondence in 1848-9 with a friend of his on the matter: perhaps this led to his experiments. The general impression of the meeting seems to have been rather opposed to any absolute economy being the effect of the use of the waste gases. On this subject, as affecting the quality of the iron, I have promised you some details, which I hope shortly to have sufficiently complete for publication. In the meantime, what I principally wish to notice is the process of gaseous deoxidation, which Mr. Stephenson "does not understand."

It is now as much as 20 years since the late Mr. Macintosh patented a process for the conversion of iron into steel, without the presence of concrete carbon, by the simple agency of carburetted hydrogen gas. There was no doubt whatever about the steel being effectually carbonised: the plan failed solely from the difficulty of confining and managing the gas at the high temperature required. The obvious deduction from this established fact was that the deoxidation and carbonisation of iron was *at all times* effected by gaseous action. Nature has no caprice; it does not suit with her economy to effect the same object indifferently by several agencies sometimes one way, sometimes another. The mode in which the solid coke of a blast-furnace could enter into combination with the chemical atoms of the oxides, which were loosely interspersed in very imperfect contact with the carbon, has always been difficult consideration. My father very early made many experiments as to the agency of carbonic acid at high temperatures, and found it to be null; but when subsequently the existence and composition of carbonic oxide came to be definitely determined, and when Messrs. Playfair and Bunsen had ascertained that carbonic acid did not exist immediately over the tuyères, but that the whole of the second zone of heat in the blast-furnace was filled with the more carbonised combination of oxygen, an entirely new light was thrown upon former difficulties. There seemed no doubt whatever as to the process which actually constituted the smelting of iron ores; but still the evidence, however strong, was that of inference, not of proof. Early in 1849, wishing thoroughly to investigate the matter by further aid than my own observations and experiments, I wrote to enquire of Mr. John Mitchell if he could give me any experimental facts as to the agency of carbonic oxide gas in the deoxidation of metals. He replied that he was then actually experimenting on the subject. In the autumn of the same year he published in your pages his highly valuable exposition of the changes in volume and temperature which the blast entering a furnace undergoes successively by the combinations it is exposed to. I then stated my own views fully in several letters, expressing the conviction that in all the processes of the iron manufacture, not only in the blast-furnace, but in steel cementing furnaces, where the iron is in intimate mechanical contact with the carbon, the effects were solely due to gaseous action. But the conduct of the furnaces rendering actual proof impossible, I suggested a conclusive experiment, to be performed by an accomplished practical chemist. Mr. Mitchell undertook to conduct the operation; but I presume his numerous engagements have prevented his obtaining the proof which this interesting experiment would afford. Mr. Ebelman's paper followed in 1851; and as far as I can gather from your report, Mr. Blackwell appears to have given his views rather too exclusive a priority over Mr. Mitchell and myself; but the feature which has most singularly arrested

my attention is, that Mr. Stephenson, as arbiter of the discussion, declares he does not understand such a process. I see also in the same Journal that Mr. Stephenson does not understand the term "natural ventilation." Is this intended to be supercilious? If the decomposition and recombination of carbonic acid gas were alleged to take place in the same region of the same furnace, there might be more difficulty in understanding the fact; but as Mr. Stephenson may not be entirely familiar with the iron smelting furnace, I will suggest an experiment in a furnace with which he is conversant, which may resolve his difficulty. In one of the tubes of a locomotive boiler, which is heated from a grate carrying at least 18 in. of incandescent coke upon the bars, suspend a fragment of hematite or other peroxide of iron. Examine it from time to time; and when it has become a metallic mass brightening under the fire, then note how many hours it has been exposed to the carbonic oxide so wastefully generated and discharged unconsumed by the present arrangement of locomotive boilers. The "metallic sponge" shown to Dr. Faraday by my father's old friend, M. Le Play, is no novelty to the experimental metallurgist.

March 8.

DAVID MUSHET.

DR. FIFE'S REFORMS.

SIR.—Dr. Fife thinks my remarks are puerile, and I think his propositions are puerile—we are, therefore, balanced; especially as I also think it is much too-far-fetched to seek the character of a colliery viewer in London. But I think the Doctor is rather bold to take this epithetical ground, when the main stay of all his plans, commanded by his own evidence to the Legislature, the steam-jet as a substitute for the furnace, has proved what I predicted it, a puerility; a fact quite sufficient in itself, without an ocean of conjecture, to account for the "dormant state" of a society which erected itself on that basis. I cannot help remarking, for it is continually recurring to me, the strangeness that the same persons who had been trying to substitute hot air for steam as a motive power should then desire to substitute steam for hot air as a ventilating power. It strikes me as a complete synod of cross purposes. As to the list of long words which the worthy Doctor proposes as the means of improving colliery management, I must follow his example, and leave their efficacy to the common sense of your readers. That they are merely words without any definite meaning, and, therefore, with no definite use, I need only point again to the steam jet, as indicating the precision of the actual knowledge of the teachers or professors of these very sciences, or words. As to the "philosophy of mathematics," "the chemical laws of calorific" or "the effects of gases on the living system," I think it will be a serious affair if all our collieries are to stand still, or wait for improvement, until the learned have come to a conclusion on such controversies. As respects the matter immediately in hand, pneumatics, I presume, means ventilation; and here, in the very threshold, there is a controversy which is the right pneumatics, and in which those who call it by that name are proved to have been wrong. Hydraulics, of course, means pumping; rather too heavy an affair for theorists, and, therefore, they have not meddled with it. Dynamics means, I imagine, the strength of men, horses, and engines, on all of which I have not heard that any society contemplates a reform. Gravitation must mean falls of roof, falls of coal, and falls of any kind down the shaft, on all which points I am not aware of anything remarkable that boards of science have done, or are likely to do. The practice of mathematics means, I presume, besides mapping, dialling, &c., all which is known out of London, calculation in general, and figures upon practical colliery details. Where, then, can science, *par excellence*, show any to compete with the calculations given in the Lord's Committee, for instance, by Mr. Nicholas Wood? I say it advisedly from long observation, that these long words make a hundred ases for one useful member of society. The majority go up and down upon them like a child on a hobby-horse; the toy becomes an end instead of a means—much ado about nothing, for it never moves an inch forward. The mouth is full, and nothing else. Hundreds of men and overlookers, who would stare bewildered at dog-Greek, have a knowledge far more to the purpose. I must plead entire ignorance of Dr. Fife's efforts on general reform, and on strikes; but I quite agree the interests of masters, workmen, and their medical attendants, are identical. It is only the secretaries and treasurers who profit by the injurious strife. But I think the Doctor makes a very remarkable admission—namely, his opinion that medical examinations are *imperfect*. Now, if in a widely-spread subject like physic, affecting every member of the community, dealt with by the longest, most educated, and most extensive experience, with frequent legislative assistance, it has not been possible to digest more than an imperfect system of examination, where a *public examination* is *absolutely necessary*, what prospect is there of getting up a private, extra-judicial, *on amore* sort of colliery board, which shall not be a thousand fold more imperfect? I would say, "Physician, heal thyself," perfect your own occupation, and then attempt an amateur meddling with ours, under a warrant of success. Of course, Dr. Fife will do as he will, as he tells us; but I can see plainly that the theory and patronage multipliers are losing hope of their views being fostered in the decisive hands of Lord Palmerston, and that they are uncertain of increasing that importance which comes by talking. If he can devise means to conquer an immense difficulty, and enforce more stringency on corner-inquests, on either side, whether against the master who neglects his duty and interest, or against the workman who does the same—for the difficulty is known to exist one way as well as the other—more good may be effected than all the harm to be accomplished by the greatest army of sub-inspectors ever levied. Moreover, as the Legislature has seen fit to place persons in such a serious and difficult position as supervisors of a vast amount of private talent, property, and enterprise, I think salaries commensurate with the importance of the office might not be an objectionable reform. Those spunging comforters to country persons, the education inspectors, have as high a salary, besides their other preferment, merely for asking poor children but too often very foolish questions. Inspectors of prisons have twice as much; and I quite agree with Dr. Fife, that in this and other respects in this age, morbid philanthropy regards far more the felon than the industrious, upright workman. But I cannot see the propriety of holding up the pauper, if a pauper indeed, as a term of degradation—the boundary mark for the lowest degree of treatment. The inspectors appear to have done as well as it is possible what they have to do; some have shown great judgment and discrimination; but an inspector, or more properly, according to the spirit of the Act, an adviser, ought to be better than the best; and I conceive, though utterly ignorant of the facts, that the masterly talents and energy of Mr. Blackwell might have been retained for the public good, had the remuneration been something more commensurate with the importance of the duty to be performed. I have my own opinion on the abstract question, as is well known; but whatever is done, ought to be well done. Of the charges of libel brought against Dr. Fife, I know nothing; but when a person thinks too much of himself he generally thinks too little of others, and it may then become a question which is the libelled party.

DAVID MUSHET.

ON THE CAUSES OF EARTHQUAKES.

SIR.—Few if any of your readers, any more than myself, ever had it in their power to read a simple description of earthquakes, and the atmospheric conditions under which they occur, so as to enable them to judge correctly of the theories already propounded, or to enable them to advance one more in accordance with facts. To judge correctly of the cause of earthquakes, I would submit the following description, observed at Comrie and immediate neighbourhood, a village in the western district of Perthshire. There are four forms in which earthquakes are exhibited—1. The perpendicular; in these sometimes there is but one heave, more generally two; on one occasion there were three heaves. When there is more than one heave they are in rapid succession, but more so in dry weather than in damp. There is then a quivering motion of the ground, while I cannot find that the shocks are perpendicular above a mile in diameter. Assuming the centre to be a short distance north of Comrie, one thing is certain: at the distance of two miles from the assumed centre the shocks are felt inclined. Those in opposite directions held contrary opinions as to the source of the shock. The second class have a side motion, like the wave. With these earthquakes there is sometimes one side wave, but more generally two; I never observed three. The third class is merely a slight tremour of the ground, such as is produced by the rapid motion of a carriage passing through the village. I am not aware that this class of earthquake is observed six miles distant from Comrie, whilst the two former are often transmitted great distances from that place. The fourth class is nothing but a slight explosive sound, more distinctly heard in the open air than in houses; in this respect it is the reverse of the other three. I contend that it is wrong to class them as earthquakes: they are, however, more frequent than the others, and, on some occasions, very numerous; but are not heard at any distance, the loudest not extending two miles from the seat alluded to. These are all the forms of earthquakes I know. I wish, therefore, Mr. Blackwell had named how he learned the process. I had some correspondence in 1848-9 with a friend of his on the matter: perhaps this led to his experiments. The general impression of the meeting seems to have been rather opposed to any absolute economy being the effect of the use of the waste gases. On this subject, as affecting the quality of the iron, I have promised you some details, which I hope shortly to have sufficiently complete for publication. In the meantime, what I principally wish to notice is the process of gaseous deoxidation, which Mr. Stephenson "does not understand."

As to the atmospheric conditions under which different earthquakes occur, I may state, in the first place, that they occur in hot, in cold, and in dry weather; likewise in windy, and what we understand by calm weather, but not during easterly or westerly winds. As this is an important point, I repeat that when an earthquake occurs in windy weather, the wind is either from the north or south points, or nearly so. Again, on many occasions, when the state of the atmosphere permitted such observation, I observed that when the under current of air, at the time of an earthquake, was from the south, there was an upper current from the north, and vice versa. All the earthquakes that have occurred here were preceded by much wind or rain, within 24 hours of their occurrence. At the instant of the shocks occurring, there were great quantities of aqueous vapours in the lower regions of air, either in the form of clouds, mist, hail, &c. I am positive that it was so with all the earthquakes since 1839, excepting the second on the night of the 23rd October, 1839. At the time of the first shock that night, which was perpendicular, it was not only dark, but the air felt thick; at the time of the second, which was undulating, it was clear; yet from the fact that it was getting clearer at the time of the shock, I am justified in assuming that the aqueous vapours were moving at the time. All the earthquakes that occur in dull or wet weather are slower in motion and longer in duration, as the one in wet weather will be found to last three or four times as long as the one in dry weather. The earthquakes are not felt in all parts of this district alike; the shocks are much more severe upon good stratum than on bad; all the houses that were damaged were situated where there was a very wet substratum, and no houses were damaged where there was a depth of dry soil.

Mr. Editor, I think we might as well attempt to submerge the British Isles as to attempt the solution of the earthquake problem, upon the hypothesis of their being the effects of molten matter in the interior of the earth. Those who think otherwise may try their ingenuity to make it out, but let them not forget the injury they do to the inhabitants of earthquake countries, who suffer more terror from false theories and exaggerated statements than from the earthquakes themselves.

I will now very briefly state what appears to me to be the cause of earthquakes.

First, no person doubts but that the sound of the earthquake is produced by the motion of the ground consequent on the shock. If so, the earth must move before the sound is heard; and as the neighbourhood of Comrie is the only part where the shock is felt before the sound is heard, it follows that earthquakes must originate there; and as in other parts the sound is heard before the shock is felt, it shows that the earthquake moves with a velocity less than that of sound. Again, the fact that at the time of the great earthquakes occurring there were great quantities of aqueous vapours in the lower regions of the air, and the shocks being severest where there

was most aqueous matter at or near the surface of the earth, shows that aqueous matter has much to do with the cause of earthquakes—in short, it is the medium through which electrical acts in producing the earthquake phenomenon. In this case what could be more natural than that the greatest quantity of vapour in the lower regions should produce the greater earthquake? What could be more natural than that when the aqueous vapour was stationary, the earthquake should be perpendicular? and what could be more natural than that, when the aqueous vapour was moving, the earthquake should be side or undulating? It is most probable that, at the instant of the shock, there is a conjunction of the higher and lower current in the air above mentioned. Again, most probably those explosive sounds that are so frequently heard are caused by the explosion of oxygen and hydrogen gas, consequent upon the decomposition of water in the trap rock under the bed of the River Levenock, where the centre or seat of earthquake's disturbance is. One thing is certain, those living nearest this spot hear more of these explosive sounds than others. Here it will be proper to observe that the course of the Levenock is north and south—the direction of the winds under which the earthquakes occur. I am aware that some still hold the seat of earthquakes to be under some of the neighbouring hills.

Lastly, I will give what appears to me, from a review of the whole facts bearing upon the question, the origin of the Comrie earthquake, which began in 1838. In 1837 a magnetic rock was opened out for a quarry, for the benefit of the hewers of Cowrie, upon the edge of the River Levenock; a short distance south from the centre of the earth. Previous to the excavation, the magnetic rock dips north under the river, where different geological formations underlie each other. Previous to the excavation, the magnetic rock was covered with dry soil, so as to exclude the atmospheric influences; but when the quarry was opened out a medium of communication for the magnetic disturbances opened which did not previously exist. That is the true solution, the following facts will strongly support. From the opening of the quarry until 1809 the hewers frequently required stones; by the frequent quarrying, a fresh surface of the magnetic rock was exposed to the atmosphere; this period was marked by very frequent earthquakes, many of them were very alarming. About 1809, a young nobleman, who at present stands high in her Majesty's counsels, came with his sister to reside in Cowrie Mansions, which is near the quarry; in consequence of this, the hewers were forbidden the use of the quarry until about 1817 or 1818, when it was re-opened. During the period that the quarry was shut, a marked change took place in the earthquakes, they were far milder and much less frequent; but when the quarry was re-opened, the earthquakes resumed their former activity, until the quarry was again closed, which was followed by a milder form of earthquake. About 1834 the quarry was again opened, and in 1838 a new quarry was opened on the same rock upon the other side of the river, so that by the working of the two quarries a greater extent of the magnetic rock was exposed to the atmosphere than ever before; and it is a well-known fact that between 1839 and 1840 there was a greater number of alarming shocks than ever occurred in the same period of time. There has not been any quarrying since 1849, and the earthquakes since that time have assumed their milder form, and are of less frequent and appearance.—JAMES DRUMMOND: *Comrie, N.B.*

ON THE NORTHERN MINING DISTRICTS—NO. VI.

SIR.—Having given you an historical and descriptive account of the Derwent Mines up to 1812, I shall now proceed with the further progress made in working them. In the latter part of 1811 the affairs of the lessees became somewhat embarrassed, and to relieve themselves from the difficulty, they determined on disposing of a portion of their interest in the Derwent Mines, and also in the Arkindale Mines, to a company of gentlemen formed in London under the designation of the Arkindale and Derwent Mines Company, who, with a large subscribed capital, supplied the means to carry on the works as originally projected. For some time after, the mines were not open to satisfy the expectations of the proprietors, several of whom retired in 1817; the workings in the great limestone were hard and costly, led did not bear in proportion to the price of iron, steel, timber, ropes, candles, powder, and wages, and it became a serious question for consideration, to how far it might be advisable to supersede the use of steam-engines by water-power. Coals were expensive, and had to be carried 10 to 12 miles over bad roads; it was, therefore, resolved to substitute water-wheels and water-pressure engines for the steam-engines then in use for pumping, and consequently all the water obtainable within the limits of their district was brought by water courses to the highest level possible (where reservoirs were made), and from thence carried over the several wheels and engines for pumping, crushing, washing, and smelting, one after another, from the highest to the lowest point; thus using the same water to work a water-pressure engine at Whitehaven, & then a water-wheel for drawing work at Rashawshaw, & a 44-ft. wheel for pumping at the same place; from thence over two wheels for crushing and washing the ore at Jeffries' washing-rooms, and over a 48-ft. wheel, by the action of sliding spears, pumped water out of two shafts upon Jeffries' Lake; from thence over the smelting mill wheel, and a little further below over one water-wheel for crushing, and one for driving a running chain with buckets, and working a great number of sieves in the washing-tubs; water from the same reservoirs also served to work a very powerful double-acting water-pressure engine, on a deep shaft in Jeffries' Sunbeam, in Deborah's level. Many improvements were also made by means of machinery and other appliances, to economise labour. Thus, by the judicious application of machinery, and economy of working, the mines went on increasing in produce and realising large profits for several years. I have shown that, so far from this being the case, they are even now but partially worked out. The operations from 1817 to this time have been carried on upon a small portion of the district, and notwithstanding that the former lessees abandoned them before 1807, believing they had exhausted and totally worked them out, the first year after the new lessees commenced (although all the shafts, levels, drifts, air and water courses, had to be opened and repaired) 567 bings of ore were raised; in the five following years, ending 1813, 3666½ bings were raised; in the five years ending 1818, 13,741 bings were raised; in the five years ending 1823, 29,733 bings were raised; in the five years ending 1828, 27,761 bings were raised.

Though large profits accrued, the lessees did not apply them to a further development of the resources of their own district (where they had quite sufficient room for further explorations), but entered into extensive speculations in other mining districts of the North Riding and West Riding of Yorkshire, in Cumberland, Westmoreland, and Northumberland. A few of these turned out profitable, and others ruinously expensive, so that all the profits of the Derwent Mines were swallowed up in so many unprofitable adventures that the lessees were obliged to resort to a new arrangement; and, in the commencement of 1854, a Joint-Stock Company was formed in London for working the Derwent Mines alone, under the designation of the Derwent Mines Company, with a capital consisting of 7200 shares, of 10s. each, of which 80s. was paid up. The machinery was in perfect order, all the water of the country brought to reservoirs, so as to act upon the whole, every appliance for economising labour then known were brought into use, sufficient ground was laid open to afford profitable workings for several years without any extra outlay, and in the succeeding five years, ending with 1835, 20,300½ bings of ore were raised; five years, ending with 1843, 16,448½ bings of ore were raised; five years, ending with 1848, 18,243½ bings of ore were raised; in 1849, the produce was 3472½ bings of ore; in 1850, 1851, and 1852, I have no correct account, but believe it was somewhat about 3000 bings in each year; in 1851, a further addition of 40s. per boding, by the old mode of refining; by Mr. Pattinson's process much more is now obtained. I shall probably have something more to say about Derwent Mines hereafter, but in my next I mean to commence a description of Allendale, Whitfield, and Alston Moor.

JOHN DOLPHIN.

LEAD MINING IN THE KESWICK DISTRICT, CUMBERLAND.

SIR.—Your remarks in the Journal of the 12th having drawn great attention to the Keswick Mines, I think it may not be uninteresting to the mining world if I give a slight sketch of the present state and prospects of these and other mines now working in the immediate neighbourhood of Keswick. In the Keswick Mining Company's seat, at Brandley, there is a new shaft being sunk to cut the vein at a depth of 50 fms. from surface, and is now down 20 fms.; this will open out 30 fms.

A company has been formed to work the GREAT SADDLEBACK MINE; but nothing of consequence has yet been done. There are other mines springing up in the neighbourhood; and I trust ere long we shall see this one of the best districts in the kingdom. All we want is capital and energy; for wherever it has been applied it has led to successful results—the Kewick Company's and the Goldscope sets alone being capable of being divided into fifty sets, and would have been so if in Cornwall or Devon. RICHARD B. SHEPHERD.

Portsmouth, March 22.

JAMAICA COPPER MINES.

SIR.—It is now some time since public attention has been directed to the mineral wealth of Jamaica, and several companies have been formed for the purpose of developing resources of incalculable value, which have hitherto been permitted to lie unexplored. I believe, however, that as yet but a very imperfect impression exists in this country, and even in Jamaica itself, as to the extent and value of the deposits of that fine island. No one who has traversed the mountain districts, with a view to even the most cursory investigation of their geological formations, can doubt that copper ore exists to a very large extent throughout the range of mountains which intersect the island from east to west, and especially within the districts of Metcalfe, Port Royal, and Saint Andrew; but, although several enterprising gentlemen, residing in Jamaica, have made efforts at various times to establish mining operations on something like an effective basis, those efforts have invariably failed, from mismanagement or want of capital.

The presence of copper ore, however, in large quantities, and of a richness unknown throughout the copper mines of this country, was placed beyond a doubt by the earlier attempts to work the Mount Vernon and Thomasfield mines, which failed solely from an inability at the time to awaken that confidence among capitalists here which was necessary to induce them to engage in them. The works, I believe, have been lately resumed, and bid fair to repay very amply those who have embarked in the enterprise.

The fact of the existence of copper in the island soon found its way to the United States, and about four years ago some enterprising Americans visited Jamaica for the purpose of surveying those parts of the country supposed to be copperiferous, and of making arrangements for taking out the ores in case their investigations should prove such ore to exist in sufficient quantities to justify the outlay. The result of this survey, which may be said to have been going on ever since, was to confirm fully all that had been previously reported on the subject, and it is, I believe, to the industry of Mr. Ripley, one of the American's referred to, that the Job's Hill and Pembroke mines now being worked by an association of gentlemen lately formed in this city, under the designation of the Metcalfe Mining Company, is attributable. These mines were discovered in the early part of last year, not by hazard, but as the result of scientific investigation; and taking them as early examples of copper mining, systematically set out foot, in Jamaica, they stamp at once the character of the country, and exhibit a field for industry and capital which I am satisfied only requires to be known to become extensively cultivated.

Job's Hill is situated in the parish of Metcalfe, and is about 13 miles from Annette Bay, a convenient shipping port, to which place there is a carriage road within three miles of the mining works. Pembroke adjoins Job's Hill, and the mines now being worked on the two properties lie within 1½ miles of each other, and there seems every reason to believe, tend to a common centre.

Private accounts represent the progress of the works and the indications of success in a highly favourable light. Adits have been driven horizontally into the mountain at an elevation of 300 ft. above the valley, and three distinct lodes at Job's Hill, and two at Pembroke, have been struck, which are represented to be of unusual richness and extent. I can state from personal knowledge that assays of the ore, taken indiscriminately, give an average of 40 per cent. of pure copper, in addition to something like an average of 50 ozs. of fine silver per ton of ore. The works, however, are in their infant stage. All that has yet been done has been effected by, I believe, some half a dozen Cornish miners, assisted by ten or a dozen negro labourers, and yet the last accounts received state that between three and four hundred tons of ore, estimated at from 30% to 40% per ton, were waiting for shipment.

Judging the value of mines in Jamaica by analogy with that of others yielding an ore very inferior in quality, I think I am fully justified in directing a more general attention to the mineral wealth of that island than has yet been bestowed upon it. I observe one English mine, whose shares of 17s. paid are quoted as worth upwards of 400s., and I am told the ore of that mine yields an average of about 8 per cent. of copper. If such be indeed the value of mineral enterprise in this country, I cannot but think that Jamaica offers an additional field for the capitalist well worthy of his consideration, and I shall be rejoiced if by thus directing attention to resources which, according to all human foresight, appear to foreshadow such general benefit, I shall assist in drawing towards a country so long neglected, and yet so bountifully blessed by Providence, a share of that capital which has been of late most injuriously diverted from it.

I may add that I possess no share in any mining company, and that I have no interest in the matter beyond that which all who reside in the colony, and whose fortunes are mixed up in its fate, must feel in a question of so much importance.

London, March 16, 1853.

WILLIAM GRID, Delegate from Jamaica.

GREAT NUGGET VEIN GOLD MINING COMPANY.

SIR.—As a shareholder in the Great Nugget Vein Company, I beg to thank you for having given publicity to the clear and apparently truthful statement of the constitution of that company, which appeared in your Journal of the 26th Feb., the correctness of which the reply of Messrs. Dunbar and Co. in no way disproves, who themselves appear most unaccountably to be in entire ignorance, both of the terms upon which the colonial shares were issued, and of the position of the English shareholders in relation to them. That each shareholder should go to Limehouse, share in hand, is manifestly impracticable; and were it not so, it would be most undesirable that information which ought to be given not only to the shareholders in general, but to the public at large, should be thus obtained; and I, therefore, avail myself of your columns to request to be informed upon several points of vital importance to the success of the company, upon which we are now altogether in the dark. In adopting this course, I am aware that I am laying myself open to the charge of having some sinister object, but as my sole motive is that the real position of its affairs may be better understood, I shall not be deterred by any such consideration. In order to this, it is necessary that the shareholders should know what is the amount of capital subscribed in Australia. What was the price paid by the company for the right of the original proprietors of the claim at Louisa Creek? Were any and which of the directors of this company the proprietors from whom the purchase was made? Why was this claim (described in the prospectus as the Burra Burra of gold mines) relinquished by the original proprietors, after an engine, houses, stabling, sheds, workshops, and outbuildings had been erected, and operations commenced? Why was not the fact stated in the prospectus (which has only lately come to the knowledge of the shareholders) that the right purchased was one for seven years only, a considerable portion of which had then expired? Has this company any guarantee that the claim will be renewed to them at the expiration of that term? Were the 800 ozs. stated in the prospectus as the produce of their own mine, from the mining of this company, or from the unsuccessful and unremunerative operations of the former proprietors, referred to by your correspondent? Has this company mined or reduced any ore whatever? Is it not a fact that the works of the company have been long since abandoned by their hands, and were so at the date of the latest intelligence, and operations entirely suspended in consequence, with scarcely a prospect of procuring a fresh supply of labour for their resumption?—a state of things which may sufficiently account for the willingness of the original proprietors to sell their seven years' claim. Upon all these points considerable doubt now exists in the minds of the shareholders; and it is necessary that clear and definite information should be given, to prove that this is a *bona fide* undertaking, and to re-establish that confidence which the want of it has tended greatly to lessen.—T. P. Islington, March 15.

GREAT HEWAS MINE.

SIR.—As I am always glad to see at work every mine which presents fair prospects of profitable results, I learn with pleasure that workings in Great Hewas, near St. Austell, are to be resumed. But I cannot permit an unfair reference to the former management to pass without correction. In a paragraph in your Journal of last week it is stated that owing to the "low-price of tin, and inefficient management", the mine was relinquished. Now, as I know why the workings were abandoned by the late company, I will state the reason to you. It is true that the price of tin was low, but that circumstance alone would not justify the suspension of the works, nor was that the real cause. The real cause is to be found in the fact, that one shareholder had an interest so great that he could not afford to meet the calls which were made upon him for capital to develop the mine. The mine was not, I believe, drained below the 50 fm. level, and yet from that depth a large amount of tin was raised; and, but for the reason alleged, I have no doubt the mine would be working to this day with good profit. There was no fault in the management. Capt. John Davis, who, in conjunction with Capt. Carthew, managed this mine, is a man of sound judgment in mining matters, and energetic in execution; and from what I know of him, I am prepared to say that a more upright and efficient manager cannot be found in Cornwall.

Truro, March 21.

R. SYMONS.

MINING LAWS—MINING PROSPECTS.

SIR.—In my late letter of 21st February, I transmitted a communication under the above head, conveying a passing glance at the "mining prospects" of this particular locality—the western division of the county, from Hayle to the Land's End, and which generally speaking, may be described as profitable at present and promising for the future. It affords me equal satisfaction to be able to report that from all accounts the other division of western Cornwall, from Hayle to Redruth and Truro, is also progressing very satisfactorily, and that numerous new and heretofore suspended mines are verging towards a favourable development. It must, however, be borne in mind that the permanency of this prosperity will in a great measure depend on the maintenance of a remunerating standard for the sale of the mineral ores derived from British mines, without which a reaction will ensue, and, in all probability, cause the extinction of some bright constellations, as well as the numerous "rushlights" of mining adventures. In my humble opinion, it becomes, therefore, the duty of the mining interest to limit its patronage to legitimate mining enterprise "at home," and to discourage the rapid and unhealthy growth of projects which daily rise into imaginary existence over the whole face of the globe, inviting us to the problematical exploration of all the known and unknown islands of the Southern Seas and Indian Ocean. Surely, it is high time that this unnatural extension of foreign mining, smelting, and railway companies, devised for the extraction of British capital, and in direct opposition to British interests, should have a limit; otherwise the ingenuity "of all the world's promoters" will have no end.

With these few general observations, destined for the protection of British and colonial interests and native industry, in juxtaposition with foreign investments, I pass to the further consideration of mining subjects, and proceed to that of "mining laws," as the other article under the category of the present correspondence.

I have perused with much attention the rules and regulations introduced by your correspondent, "E. P. H." as the basis of the particular by-laws which ought to form the foundation of well-constituted companies for the working of mines and quarries, in conformity with the premises contemplated by the 63d section of the Act 7 and 8 Vic., cap. 110. The mining principle as therein exhibited is admirable, equitable, and appropriate, and equally applicable to mining on the Cost-book System in the county of Cornwall. If, however, I might be permitted to suggest any addition to those rules and regulations, it would be that one of the concluding recommendations of "E. P. H." letter should be embodied in some distinct clause to the following effect:—"That the capital of the company being paid up by subscribers on the allotment of the shares, no shareholder shall be liable in any respect for any debt or future calls without his own concurrence; and that the directors or the managing committee of the company, either for the present or any future period, do take upon themselves the responsibility and liquidation of all debts and liabilities which may be created under their own acts and deeds on behalf of the company."

In conclusion, I would beg to add, that notwithstanding the setting in of winter with a severity somewhat unusual in this district, I feel gratified with my visit to the land of "One and All," and with the pleasing variety it has afforded. No excursion can be more agreeable or useful to the theoretical or practical geologist, mineralogist, and mining

capitalist, the general tourist in search of the picturesque, or the valetudinarian for the re-establishment of health, than that to this mild and delightful region of Penzance and its vicinity. A tour to St. Michael's Bay and the summit of its celebrated mount; its extension to the Land's End and the site of the Logan Rock, with the brilliant views they present over the wide expanse of waters, and over the Scilly Islands to the Atlantic Ocean, are of themselves well-worth of its inconsiderable expense. And finally to return by sea from Hayle to Clifton (a voyage of only 12 or 15 hours' duration), along the delightful shores and picturesque scenery of the coasts of Devon and Somerset, will prove a tour not to be regretted, but on the contrary, to be remembered with delight. As such I beg leave to recommend it to tourists and to the public. SEYMOUR SMITH, M.E.

Penzance, March 14.

[ADVERTISEMENT.]

EAST PERRAN ST. GEORGE MINE.

SIR.—In December, 1850, I took up the sett of East Perran St. George Mine, in Perranzabuloe. The following parties joined me therein—viz., Captain J. Pill, agent of the last-named mine, Mr. James May, Miner's Bank, Truro, Mr. Peters, agent of Tresloch Mine, Mr. Lether, of Mithian, and Mr. James James, the advising steward of Capt. Oates, the toller of the land. After I had procured the license, I framed the rules in a cost-book, with a view of getting a company to work the mine; also, 200 copies of a report of the mineral properties of the sett were printed and circulated; after which, a meeting was convened at the Inn, at Perranporth, when, to my surprise, Capt. Pill offered me a trifle for my interest in the sett; and, having remonstrated with him on his conduct, Mr. James then said I should have nothing to do with the sett.

Subsequently to this period, I went to St. Agnes with Mr. May, when another meeting took place, Mr. James May in the chair. Mr. James May now said, that the lords of the land had instructed him to say that I was to have nothing to do with the sett; upon which Mr. May said, "Let me take you interest in my name; you can trust me; I'll pay all costs incurred, and see that you are fairly dealt with."

Some months after this, I was informed that a certain mine agent had sold the mine to a London company, and in reply to my enquiry, in your protecting Journal, I heard that I had a certain number of reserved shares, on which a sum of money had to be paid. Late, Captain Hooper, of Perranzabuloe, has been to London, commissioned by the parties before named, to carry out an agreement for the sale of the mine. Mr. May informed me, a few weeks since, that on his (Hooper's) return, I should find the matter all straight. The license has been duly renewed; and, at the eleventh hour, Mr. May comes to say, "That he is very sorry, but a company in London has applied to Sir R. Vyvyan's solicitor, at Pencalfe, for the sett," and intimating that the same was gone.

Now, I wish to ask the parties before referred to, through your valuable columns, what is the meaning of all this conduct? What Captain Hooper has agreed to give May, Pill, and Company, for the sett? and whether the application sent from London is not directly or indirectly through Capt. Hooper, or some of this party? And, finally, why have these parties kept the sett from me, and formed this systematic collusion?

Bear in mind, that if there is a power in equity, as there is none in honour, that I shall not be taken in as I was in Wheal Golden, for I will obtain an injunction, and stop them from working.—J. TUNN: Truro, March 21.

Meetings of Mining Companies.

CALLINGTON MINES COMPANY.

The bi-monthly meeting of shareholders was held at the office, Salvador House, Bishopsgate-street, on Saturday last, the 19th inst.—P. STAINSBY, Esq., in the chair. The notice convening the meeting was read, and the following accounts submitted:

Balance last account	£3156 1 7
Mine costs, three months to 31st Jan.	2114 16 2
Interest and discount	23 6 9 = £2394 4 6
Silver-lead sold	£972 9 0
Black tin ditto	57 19 4
Copper ore ditto	330 9 10
Calcs.	1250 0 0 = 2610 18 2

Balance against the mine

£ 683 6 4

There was, however, a parcel of copper ore ready for immediate sale, which would reduce this balance by about 350.

The following joint report, from Capts. Woolcock and James, was then read:

MARCH 18.—South Mine: The lode in the 125 fm. level north is still in a disordered state, we are not yet through the capel spoken of in our last report, this very much impedes our progress in driving this end, it is now within 20 fms. of Costnt House shaft; if this level should prove as productive as the 112 did, it will lay open profitably a great ground. The lead pitch in bottom of the 125 south is not so productive as last reported, it is now yielding 14 cwt. of rich lead ore per fm. The incline shaft is sunk 20 fms. below surface, through a beautiful light blue clay slate, or killas, laying open moderate tribute ground. Kelly Bray shaft is sunk 9½ fms. below the 70; the lode in this shaft is 2½ ft. wide, composed of spar, mud, and good stones of copper ore, carrying two well-defined walls. The 70 cross-cut north is driven 25 fms. 4 ft., and has not as yet intersected Rowe's lode: taking into account the effect the great cross-course had on Kelly Bray lode, both in the 50 and 90, in heaving it 5 fms. north, we are led to believe it has the like effect on Rowe's lode, therefore we might expect a 26 fm. cross-cut to intersect it; we have not seen the stratum more mineralised than at present. The lode in the 70 east is 2½ ft. wide, yielding 4 tons of copper ore per fathom, worth 7s. 10d. per ton—this level is driven east of shaft 54 fms. The 70 back stope will yield 4 tons of copper ore per fm., worth 7s. 10d. per ton. The 60 is driven east of shaft 13 fms. 4 ft.—the lode in this end is 3½ ft. wide, yielding 3 tons of copper ore per fm., worth 7s. 10d. per ton. The lead and copper pitches are much as usual. We intend sampling a small parcel of copper ore on Friday next, the 25th inst., about 40 tons; our object in sampling this month is to facilitate the dressing. In future we shall sample lead one month and copper the other. Our opinion of Kelly Bray is this—we do not hesitate to say it will make a lasting and profitable mine.

THOMAS WOOLCOCK; SILAS JAMES.

A communication was also received from Mr. Percival Johnson, in which he stated that he considered the lead lode at Callington had had a full and efficient trial, and that it was not desirable to prosecute it further. But as it would be necessary for the engine to remain in its place for some time to come, it was desirable to set and tribute pitches which would pay, and get out all the ore which could be obtained. He spoke highly of the prospects at Kelly Bray, which he believed would make a profitable and lasting mine. Some conversation ensued respecting the lead lode at Callington, from which it appeared that some of the county proprietors were anxious that the shaft should be sunk another lift, to give it a further trial, which, however, the majority of your column to request to be informed upon several points of vital importance to the success of the company, upon which we are now altogether in the dark. In adopting this course, I am aware that I am laying myself open to the charge of having some sinister object, but as my sole motive is that the real position of its affairs may be better understood, I shall not be deterred by any such consideration. In order to this, it is necessary that the shareholders should know what is the amount of capital subscribed in Australia. What was the price paid by the company for the right of the original proprietors of the claim at Louisa Creek? Were any and which of the directors of this company the proprietors from whom the purchase was made? Why was this claim (described in the prospectus as the Burra Burra of gold mines) relinquished by the original proprietors, after an engine, houses, stabling, sheds, workshops, and outbuildings had been erected, and operations commenced? Why was not the fact stated in the prospectus (which has only lately come to the knowledge of the shareholders) that the right purchased was one for seven years only, a considerable portion of which had then expired? Has this company any guarantee that the claim will be renewed to them at the expiration of that term? Were the 800 ozs. stated in the prospectus as the produce of their own mine, from the mining of this company, or from the unsuccessful and unremunerative operations of the former proprietors, referred to by your correspondent? Has this company mined or reduced any ore whatever? Is it not a fact that the works of the company have been long since abandoned by their hands, and were so at the date of the latest intelligence, and operations entirely suspended in consequence, with scarcely a prospect of procuring a fresh supply of labour for their resumption?—a state of things which may sufficiently account for the willingness of the original proprietors to sell their seven years' claim. Upon all these points considerable doubt now exists in the minds of the shareholders; and it is necessary that clear and definite information should be given, to prove that this is a *bona fide* undertaking, and to re-establish that confidence which the want of it has tended greatly to lessen.—T. P. Islington, March 15.

The notice convening the meeting was read, and the following accounts submitted:

To mine cost for November	£313 5 8
Ditto for December	498 16 2
Ditto for January	420 4 4
Interest and discount	0 18 5
Postage, stationery, and sundries (one year)	39 7 3 = £1272 11 10
Balance last account	591 17 1
Balance sold Dec. and Jan.	237 8 0
Copper ore, 22 tons, sold February	248 1 2 = 1097 6 3

Balance against the mine

£ 175 5 7

The following reports, from Capts. Henry Francis and Reed, were then read:

MARCH 19.—Our engine-shaft is now down to within about 2 fms. of our next or 40 fm. level, where we have a very promising lode about 2 ft. wide, or rather more, about 12 to 14 ft. per fm. On 39 fm. level, east and west of the engine-shaft, has passed through 30 fms. of good tin ground, worth for many fathoms long 30 ft. per fm., averaging from 15 to 20 ft. for all the length; and the lode now in the eastern end is worth from 10 to 12 ft. per fm., and the western level is in a fine mineralised lode about 1 ft. wide, producing some 1 ft. of tin and copper ore. The 30 fathoms level, west of shaft, on Martin's lode, is about 1 ft. wide, producing tinstuf and copper ore; the 30 fm. level, east and west of engine-shaft, has turned out a fair quantity of tinstuf and copper ore; the lode in the 40 fm. level east is much improved within the last week, and is now producing some copper ore, and getting nearly under the ore ground gone down in the bottom of the 10 fm. level; in the 20 fm. level, west of engine-shaft, we are now a little past the junction with Stainby's lode, and are turning a little south to meet with it; the 20 fm. level west, on Martin's lode, has passed through nearly 30 fms. of good tribute ground; and the lode in the present end is worth about 10 ft. per fm. for copper. The 10 fm. level, on Guskus or Stainby's lode, and also on Martin's lode, are in a good looking mineralised and gossan lode, and hold out good prospects for the next or 20 fm. level. We have now about 7000 ft. of tin in Jan. and

The proportion to each 100 now held having been read, the whole of the number was at once taken, some of the shareholders expressing a wish to be able to increase their allotment still further.

It was then resolved that the transfer of shares should not involve the necessity of issuing a new certificate; a mere endorsement and stamp on the original certificate being gilt that was necessary, and saving much trouble.

Mr. LELEAN said they must now make a call of 2s. 6d. per share, according to the resolution adopted at their first meeting.

This, after some conversation, was unanimously agreed to; the call to be paid at the office of the company on or before the 15th April.

The CHAIRMAN congratulated the shareholders on the pleasant way in which they had got through the business, and promised all necessary activity on the part of the committee of management.

On the motion of MESSRS. DAY and J. WINTER, a vote of thanks was unanimously passed to the chairman, and the meeting separated.

LINARES LEAD MINING COMPANY.

The half-yearly general meeting of shareholders was held at the London Tavern, Bishopsgate-street, on Wednesday, the 23d inst.

ALFRED WILSON, Esq., in the chair.

Mr. G. EATON (the secretary), having read the notice convening the meeting, handed to the shareholders copies of a lithographed plan of the mine, and read the directors' report, which stated that since the last half-year's report the mine had increased in value very considerably, the profits to the 31st Dec. last being 56,904. 2s. 2d., the balance of assets at the same period amounting to 15,439. 0s. 3d. A dividend of 10s. per share on the present capital of the company had been declared, and would be paid in due course. The business had increased in every respect, and was progressing most satisfactorily. A loss, however, of 315. 12s. 6d. had been sustained at the hands of robbers, but Mr. H. Thomas had adopted measures for the apprehension of the parties, who would, no doubt, be brought to justice. Mr. Eaton also read a report from Mr. Thomas, which stated that the resources of ore in the Pozo Ancho Mine had increased by 1500 tons during the last six months.

The balance-sheets and statement of accounts were submitted to the meeting.

The assets consisted of pig-lead and lead ore in stock valued at 12,238. 16s. ; cash in London and Linares, 11,309. 14s. 3d. = 23,548. 10s. 3d. The liabilities amounted to 8,109. 10s. ; showing a balance in favour of the company of 15,439. 0s. 3d. ; in addition to which were the concessions of the mines, the entire plant, engine, machinery, and pitwork in perfect condition, buildings, storehouses, and stores in stock, magazine, stables, horses, smelting-works, consisting of four reverberatory furnaces, slag furnace, blowing apparatus, moulds, tools, &c.

Mr. JOHN TAYLOR read an elaborate report of his survey, which stated that he had minutely inspected the several mining sets of the company; and, he commenced by saying that, although he ought, perhaps, to apologise for the length of his report, he felt sure that the shareholders would be of opinion that the suggestions which he was about to submit to the meeting were of importance, and that the meeting would feel it desirable that such suggestions should be carried out. The mines in this district had hitherto been worked by rude means, but, notwithstanding which, the yield of ore had been considerable. The Pozo Ancho stood on an eminence; it was admirably situated in a healthy position. The discoveries which had been made were most encouraging. The yield had been from 2 to 3 tons per fm., but the slopes in which the ore would probably yield about 6 tons per fm.: 3 tons might, however, be taken as the general average. The expense of sinking the shaft was by no means high, and his impression was that the productiveness of the mine was increasing, and that or the next four or five years it would continue to improve, if the works were pushed forward vigorously. (Hear.) The application of a steam-engine, for winding and crushing, however, was quite necessary, and not less important was a new smelting-works. He would also recommend the building of a large flue and chimney; the latter was essential in many respects, as well as in removing noxious fumes. The cost of such chimney and flue would be repaid in a year and a half, or less time. It would also be necessary to improve the road to the mine. There had been a rapid rise in the price of lead, in consequence of the large demand for that article, but some considerable difficulty had been experienced, owing to the exceedingly high charges made for carriage. That difficulty, however, might be obviated, by purchasing carts and mules. The shareholders would then become the carriers of their own ore, and a considerable saving would thus be effected. He would recommend the board to provide such means of conveyance, the cost of which would be about 2000/. The concern had now become one of considerable importance, and might be carried out to much greater advantage. He must, however, hold himself irresponsible for the value of shares in the market. All that he could say was, that he had been most desirous of telling the precise truth. He did not wish the shareholders to think the property better than it really was, or better than he had described it. (Hear, hear.) He was bound to add his testimony that the property was extremely well managed, and the board might have the utmost confidence in the zeal and energy of Mr. Henry Thomas, the company's representative in Spain, and all engaged were deserving of an increase of salary. He could safely say that the company possessed very valuable mining property, and which held out every prospect of being lasting. Besides the Pozo Ancho, there were other good mines in the district, but if the company entered upon others he could not pretend to define what the expenses would be. The ore of these mines was peculiarly rich, and the smelting could be materially improved, and he would strongly urge the necessity of adopting the suggestions which he had submitted.

A SHAREHOLDER wished to be informed whether the rights of foreigners were well secured in Spain. He had seen a report in the newspapers, which, he must say, was very discouraging in that respect; although he could not help thinking that the report was exaggerated.

Mr. TAYLOR begged to assure the gentleman that Englishmen had nothing to apprehend in the shape of danger, as far as Spain was concerned, for there was no country in which Englishmen were more respected. (Hear, hear.)

A SHAREHOLDER wished to know what remuneration MESSRS. John and Richard Taylor received for their services as managers?

The CHAIRMAN replied, 200/- per annum.

It was then moved that Alfred Wilson, Esq., and Richard Thorne, Esq., the chairman and deputy-chairman, be re-elected directors of the company, and that the election of John Addis, Esq., as director in the place of Thomas Field, Esq., be confirmed, which was carried unanimously.

A SHAREHOLDER thought it would give a great degree of confidence in the company if Messrs. John and Richard Taylor were appointed managing directors. He thought the advantages which the company must derive from the able advice and direction of those gentlemen were so apparent, that he should move that their names be added to the list of directors. (Cheers.)

The following resolution was then passed:—That the number of directors of this company be increased from seven to nine, and that Messrs. J. and R. Taylor, be added to the existing board of directors, and retain their position as managers.

Mr. HENDERSON and Mr. THOMAS COXHEAD were appointed auditors.

A SHAREHOLDER observed that he believed those gentlemen to be highly respectable, but he thought the accounts might be made out much clearer than they had been.

It was then moved, that the reports of the directors, and that of Mr. John Taylor, be printed and sent to the shareholders, which was carried unanimously. After which, the meeting resolved itself into an extraordinary general meeting.

The CHAIRMAN observed, that the meeting had now come to the question of raising capital to carry out the recommendation of Mr. John Taylor. They had heard the report of that gentleman, and the directors felt it important and imperative that the mine should be worked to the full extent, and it would then be of a most valuable and important character. Some difficulty, however, arose, as to the disposal or distribution of the shares, it being necessary that 1000 shares should be paid up. The directors, therefore, thought it advisable that 1000 shares should be sold for the highest price they would fetch, and it was hoped that they would realize a sufficient sum to insure all the purposes recommended in the report of Mr. Taylor.

A SHAREHOLDER wished to know why the board should adopt the principle of robbing Peter to pay Paul. (Laughter.) According to the report, there was a balance of 15,000/- assets, and was not that enough to go on with, without raising fresh capital?

The CHAIRMAN said, as these were fresh works, it was only fair that fresh capital should be raised to meet the expenses.

Mr. TAYLOR observed, that this mode of dealing with the finances of the company had had his and his brother's careful consideration. It was perfectly true that there was a large balance in favour of the company, but a great portion of it consisted of assets which had not yet found its way into the banker's hands; and there ought to be at least 2000/- or 3000/- at the banker's to meet the current expenses, so that they should not be driven to bring their produce into the market when the price was not sufficiently remunerative. He thought it better to declare a dividend of 10s. a share to the shareholders than to apply the money to the carrying out of new arrangements and improvements. The money had been fairly earned, and might be fairly paid. (Hear, hear.) The raising of this money was for a dilutant operation, and therefore should be met in that way. It appeared to him that 1000 shares would bring a sufficient sum into the coffers of the shareholders to meet the purposes required. It was the most simple way of increasing the capital, and he thought it better than going to the shareholders for more money.

A SHAREHOLDER thought the capital required was as well raised one way as another; but he also thought that the excess of the dividend already in hand was enough, under present circumstances, to go on with; it would prevent the price of shares being depreciated, and they should have 9000 instead of 10,000 shares. He had had some conversation with several friends and shareholders in the room, and it was their wish that a resolution should be moved to that effect.

Mr. COXHEAD thought that such a resolution as the one proposed by the previous speaker would meet with the concurrence of the shareholders; and if it were not carried, he should move that a call of 10/- be made, rather than increase the number of shareholders. If the directors would refer to the deed, they would find that they had the power to borrow up to one-fourth of the capital; and surely they could get their promissory note discounted for 10,000/-.

There could be no doubt that this mine was a good one; but who had brought it to its present position?—The original shareholders. And why?—because they saw it was a good mine, and, therefore, they laid out their money. He was entirely opposed to the creation of new capital in the manner suggested—namely, by the sale of 1000 shares. Mr. Taylor had led the meeting to believe that the mine would double its value, and he had the utmost confidence in that gentleman's opinion; for no one knew better than Mr. Taylor when he had got a good thing in his hands how to carry it out with advantage. He had no doubt as to the fulfillment of Mr. Taylor's predictions; and it would be little less than robbery upon the original shareholders to raise new capital in the way that had been proposed. He trusted the gentlemen at that table would let well alone. He could discover no reason to introduce new capital of any sort; and he hoped the directors would pause before they allowed any such infringements upon the interests of the original shareholders.

A SHAREHOLDER saw great objection to placing the directors in such a position as they would be in, by borrowing money on their promissory note. He thought it a most unfair one; but was of opinion that the shareholders ought to fall back upon their capital, and that might be done without the shareholders being mulcted of their dividends. If the directors borrowed money, they would have to pay a most extravagant interest for it, and would place themselves in a position which, as mercantile men, they ought not to be subjected to. (Hear.)

The CHAIRMAN thought the suggestion of the last speaker entirely impracticable. What would be the proportion of shareholders holding five shares?

Mr. COXHEAD apprehended no difficulty whatever in that respect. The directors could make it the third of a share, or the fourth of a share, if they felt so disposed.

The CHAIRMAN thought that would be a very inconvenient course to pursue.

Mr. THORNE expressed an opinion that the proper mode of dealing with the question was to offer the shares for sale by public auction.

A SHAREHOLDER was strongly of opinion that they ought, upon principle, to have the shares divided amongst themselves. It would be most unjust if they were not allowed that privilege; if any of the shareholders objected to take them, let them be

offered to others. He had no doubt there were many shareholders at the meeting who would be glad to take double the number of shares they had got; this was the only fair way of appropriating the shares, and he hoped the directors would not allow them to go to public sale. If a party had a good undertaking, and required the assistance of a partner, he would not take a stranger, but rather take in his friend.

Another SHAREHOLDER said the 26th section gave the company the power of creating new capital, and he thought it was well to do so. He could see no objection to the sale of shares by public auction.

Mr. COXHEAD said the 26th section simply related to the issuing new shares.

The CHAIRMAN said that left it entirely at the discretion of the board to issue shares.

Mr. COXHEAD said he had 25 old shares, and would take as many more.

Mr. TAYLOR said, the difficulty the directors felt was that, in their anxiety to put out these shares, they were desirous of doing the utmost in their power to bring money into the coffers of the company. There were many, he believed, had got shares who did not want to take more, and there were many who would like to have 10s. others would like to have 20, and some one might possibly be found who would like to have the whole. (A laugh.) He thought the fairest and best way to deal with this matter was to pass a resolution that the shares should be sold by auction. Let them be put into the hands of some respectable auctioneers—such a gentleman, for instance, as Mr. Gadson—and be sold in lots of 5, 10, or 20 shares. The board was bound to dispose of them in such a way as would bring the largest amount to the company, and he thought they were proceeding in the right way to accomplish that object.

A SHAREHOLDER enquired if the disposal of shares by public auction was a respectable way of dealing with them? Was it not calculated to depreciate the value of the shares?

Mr. TAYLOR said it was a perfectly legitimate and respectable course, and the meeting must bear in mind that although they had a large amount of assets in hand, a great portion of the capital was not available. The directors could not pay for a steam-engine with lead, nor for the building of furnaces with that article. They must have some money, and an increase of capital was indispensable. Much of the lead was now lying at the mine, and unless the improvements and facilities for conveying the ore which had been recommended were carried into effect, a very serious loss would possibly be sustained.

The CHAIRMAN said the meeting had appointed the Messrs. Taylor as their managing directors; could not the disposal of the shares be left to them?

Mr. TAYLOR: No—that would not be at all agreeable to them.

A SHAREHOLDER said it appeared perfectly clear to him, from what had been said, that the shares, if sold by auction, would probably fetch more than 12s.

Another SHAREHOLDER: So much the better.

A SHAREHOLDER: Yes, but a man does not want to give 20/- if he can get a thing for 12s.—The CHAIRMAN said, the directors found themselves in a difficult position, inasmuch as they felt that they could not issue their shares at a fixed price, and could not help feeling that a fixed price would not be dealing fairly with the shareholders. Those gentlemen, therefore, who were desirous that the shares should be issued in that way, were putting an impracticable proposition before the meeting.

A SHAREHOLDER thought the directors seemed to treat the matter very kindly and fairly, and it appeared to him that there were gentlemen present who wished the board to do that, which, under the deed, it really had no power to do.

Mr. COX: If the directors carry the original proposition, I shall demand a poll.

Mr. CROSBY: Then I advise the directors to dispose of the shares as they please; and I do so under the advice of counsel.

A resolution, that the directors be requested to offer 1000 shares for sale by public auction was then carried by a considerable majority.

A SHAREHOLDER immediately gave a written notice to the directors not to put the shares up by public auction.

A vote of thanks was then passed to the chairman, and also to Mr. Thomas, and the meeting separated. There was a full attendance of shareholders, most of whom took a deep interest in the proceedings.

METCALFE AND GENERAL MINING COMPANY OF JAMAICA.

The annual general meeting of shareholders was held at the London Tavern, Bishopsgate-street, on Tuesday, the 22d inst.

T. M. WEGELIN, Esq. (Deputy-governor of the Bank of England), in the chair.

The CHAIRMAN stated the meeting had been convened for the purpose of confirming the purchase made by the directors of the Job's Hill estate, and of raising the necessary means to meet such purchase. After the lease of this estate had been granted to the company, a rumour arose as to the validity of its title, and the directors, without in any way admitting any defect, considered their most prudent course was to endeavour to effect a purchase of the freehold of the estate, and thereby to avoid the expense and inconvenience of law proceedings. The purchase had been made for 20,000/-, and it was estimated that the royalty would be the equivalent of 15,000/-, leaving, therefore, 5000/- for the freehold. The mine was secured, and it might in reality be said, free from burden. It was a question with the directors whether they should issue 20,000 fresh shares at par: that, however, had been thought impolitic, and they had determined to issue 2000 shares of 1/- each at a premium of 9/- per share, and that there could be no doubt, as far as the financial matters were concerned, that the mine had been, and would prove, perfectly successful. The title would be perfect, and everything would, no doubt, be completed to the entire satisfaction of the shareholders. The captain of the mine had made a report, which the directors received this morning, and which was very interesting. The chairman having read the captain's report, expressed his conviction that the meeting would agree with him that the information contained in such report was very satisfactory. He might add, that persons in Jamaica had a very high opinion of the mine—in fact, a much higher opinion even than here. (Applause.)—It was then moved, that the report be received and adopted—Carried unanimously.

A SHAREHOLDER observed that he was clearly of opinion, if the report was to be believed, and he saw no reason to doubt its accuracy, the course which had been adopted by the directors was calculated to prove highly advantageous, particularly to the original shareholders, who had now the opportunity of either taking the shares at the premium stated, or allowing the public to have them.

The following resolutions were carried unanimously:—

That the capital of the company be increased by the issue of 2000 shares of 1/- each, and that such shares be first offered to the existing shareholders, agreeably to the terms of the Deed of Settlement, at a premium of 9/- per share, in order to raise 20,000/- to enable the directors to complete such purpose.

That the 23d article of the Deed of Settlement be amended by the alteration of the words, "the first director on the list of directors," to "the first directors on the list," and the words, "shall elect his successor," to "shall elect their successors," whereby such article will in future read thus:—"That at every ordinary general meeting in the month of January, in every year after 1853, the two first directors, except the resident manager for the time being, shall retire from office, and the meeting shall elect their successors, who shall be placed at the bottom of the list in an order to be determined by lot, and the order for retirement in which the original directors shall stand is that in which they are named in these presents, and every retiring director shall be immediately re-eligible."

That Arthur Anderson, Esq., of Norwood, and William Gladstone, Esq., of Fitzroy Park, Highgate, be appointed trustees of the company, in the room of John Atkinson, Esq., the trustee appointed under the Deed of Settlement.

The following is an extract from the superintendent's report, dated 24th Feb.:—

"In No. 1 lode, on Job's Hill, we have a splendid course of rich grey copper ore at the surface, on the side of the hill, such as is rare, yellow, and supposed to be equal to 70 or 80 per cent.; one Cornish miner, with one or two negroes, has raised 5 or 6 tons in a fortnight. We are going to send a splendid rock of 3 cwt. to England, as a general specimen of the quality of the lode in this place. The lode goes down to the bottom of the working, bearing marks of the highest character, and it can be seen for some fathoms in length. We have four men working two-spells from 6 o'clock in the morning until 10 at night, driving towards this rich lode about 8 fathoms below: the ground is favourable, unless the rock becomes hard. I hope we shall cut the lode in two or three weeks. We shall also send a specimen from No. 3 lode; this lode is of immense size, presenting the most splendid character—indeed, the specimen to be sent is a true one of the lode. The ore is not so bright and silvery as in No. 1 lode, but what some call muddy grey. At Pemroke estate, the men are working on the lode, which I am happy to inform you is quite satisfactory and encouraging, considering its depth; the lode is from 4 ft. to 5 ft. wide, producing stones of rich grey copper ore, the quality much the same as at Job's Hill."

A vote of thanks was then passed to the chairman, and the meeting, which was fully attended, separated.

QUARTZ ROCK MARIPOSA GOLD MINING COMPANY.

The first annual general meeting of shareholders was held at the London Tavern, on Saturday, the 19th instant.

The Right Hon. Lord ERSKINE, in the chair.

After the SECRETARY had read the advertisement convening the meeting, the report of the directors was then read, of which the following is an abstract:—

The directors had considered it their duty, in the first place, to secure efficient superintendents to proceed to California, and they were fortunate in making arrangements with Mr. Franz Jacob Schmitz and Mr. Eischweiler. The next consideration was to obtain the most suitable machinery; accordingly, Alderman Carter, in company with the superintendents, had proceeded into Cornwall and Devon, and made arrangements with Messrs. Nicholls, Williams, and Co., of the Bedford Iron-Works, Tavistock, for the construction of two steam-engines, avoiding all needless expense in the extra high finish, and by this effecting a large saving to the company, and the subsequent upholding, without in the least degree impairing its efficiency. The engines selected are equivalent to 100-horse power, with sawing machinery to be attached when required; the crushing mill and stampa are of a powerful description, and Brunton's patent washing machines are added, to form a complete set of the best devised machinery for the purpose of crushing, washing, and amalgamating the ores. A competent staff was selected in Germany, and their departure was only delayed for the purpose of meeting with Colonel Fremont, then on his way to England. The directors submitted drawings of their machinery to him, and on his arrival there, while approving of these, he stated that he would give orders to secure the company a good location in California. On the 3d of May last Mr. Schmitz and the staff sailed by the *Orinoco* from Southampton for Chagres, and reached San Francisco on the 27th of June, after having experienced great difficulties on the route. For some time after their arrival the whole party suffered much from fever and sickness, consequently operations were considerably delayed; in the month of August he proceeded to the Mariposa, and inspected the various mines; but the agents of Colonel Fremont refused to put him in possession, and he was unable to obtain any mine in the district claimed by Colonel Fremont of sufficient value to justify his taking up a location. Such being the position, he had proceeded to explore the surrounding districts, and on his return to San Francisco took all the necessary steps to protect the interests of the company, and to preserve its rights against Colonel Fremont and his estate. The result of the explorations were the discovery of a quicksilver mine, as well as several veins of coal, which, upon being tried, proved very good. Seeing the advantages to be derived from this, the directors sent instructions first to secure them for the company, and then immediately to send them full reports thereon: the directors hope shortly to be in a position to inform the shareholders of the value of this property; at the same time they do it right to add they are strongly urged by their superintendents to work the quicksilver mine, as the profits they state to be derived from it are far greater than from any gold quartz

Mining Correspondence.

BRITISH MINES.

ALBION CLAY-WORKS (St. Enoch).—The boiler-house walls are up, and we are roofing it in. The carpenters are flooring the interior of the engine-house, and making the doors and window-frames. The engineers are connecting the steam-pipes with the boiler, and the induction pipe with the condenser. This I expect will be finished by Tuesday, and then the inside work of the engine will be completed. We shall have to put up outside a fly-wheel and drum to work the tram-waggons. The claymen are uncovering the clay, which appears still good in the stopes. The mica runs are all but completed, and the masons are erecting the account-house. The bottom level is proceeding rapidly; this will be valuable when finished. We shall shortly commence another pit for settling the clay in when washed.

ALFRED CONSOLS.—The lode in the 110 fm. level, east of Field's engine-shaft, is worth for copper ore 100f. per fm. The lode in No. 1 winze, sinking under the 100 fm. level, is worth for copper ore 150f. per fm.; the lode in the 100 fm. level, east of cross-cut, is worth for copper ore 12f. per fm.; the lode in the 100 fm. level, west of flookan, is worth for copper ore 8f. per fm.; the lode in the stopes over the 100 and 90 fm. levels is worth for copper ore, as a whole, 50f. per fm.; there is no change to notice in the different levels west of this shaft. The sinking of Painter's shaft is going on favourably.

ALTARNUN CONSOLS.—Our shaft is now about 7 fathoms deep, and we intend to sink about 3 fathoms deeper, and then drive on the course of the lode; it is sunk through the lode, bearing a feather of tin on the south part of it 4 inches wide, and by all prospects at present, we shall be able to raise tin from the 10 fm. level, which we hope to sink to in about seven weeks.

BEDFORD UNITED.—The lode in the 115 fm. level east is yielding 4 tons of ore per fathom. There is no alteration in any other part of the mine, as we continue to rise and sink by the side of the lode.

BODMIN UNITED.—The water is drained, and the engine-shaft secured, 5 fms. below the 50; we intend to drop the lift again this week. The clearing of the 50, east of Truscott's shaft, will be commenced forthwith. There is still a good lode in the rise in the back of the 30, east of Truscott's shaft, which is now up as high as the 20 fm. level. The 20 fm. level east is 7 fms. behind the rise, and is producing good work. In the 10, east of footway shaft, a cross-cut is being driven north to hole to a rise from the 20 on Harper's branch for the better ventilation of the 10, and for convenience in getting the stuff to the whin-shaft. We purpose at our setting and pay day, on Friday next, to set three or four new pitches in the back of the 30 and 40 fathom levels. The samples have notified to us their intention to be at Wadebridge, on Monday, the 4th April, to sample our ores. We calculate to have about 60 tons—a great portion of which is already at Wadebridge.

BORINGDON CONSOLS.—In Annie's shaft the men are busily engaged in casing, driving, and putting in ladder-work. The 12, east of Annie's shaft, is much the same, showing strong indications of a good lode not far off; going west, the lode is improved since my last, being richer for lead, and opening good tribute ground. There has been nothing done in driving the adit level since my last. In the cross-cut north we have not yet got the footway: we cannot drive the adit and cross-cut at the same time, on account of the air. There is no alteration in the lower part of the mine. We are progressing satisfactorily with the wheel and pit-work for crusher.

BOSORN.—The 40 end, west of Halket's shaft, is now holed to the end coming from winze, and the whin is dropped to the 40 fathom level. We have commenced cutting plat, taking down braw, and have commenced stoning in the back of the 40 west. In the 40 end, west of winze, one branch of the lode is looking well, and other is not yet taken down. The tribute pitches in the 30, west of Halket's shaft, are producing very good stones of tin. The lode in the stopes in the back of the 30 are very much improved. We are getting on very well with our cross-cut: in the Well level we are progressing satisfactorily with the wheel and pit-work for crusher.

CARADON WOOD.—The engine-shaft has been sunk 2 fms. 2 ft. 3 in. making the depth 10 fms. 2 ft. 3 in. below the 30; set to nine men at 17f. 10s. per fathom. The south end has been driven 7 fms. 3 ft. 8 in. In the north end, at the 30, has been driven a cross-cut west 5 fms. 4 ft. 5 in., and 2 fms. 1 ft. 3 in. driven on the branch we cut in the cross-cut; the lode being small and disordered, we have removed the men to drive the cross-cut east, to cut the eastern lode; set to four men at 3f. 5s. per fm.

CERN GWYN.—The lode in the 20 fm. level, driving east of the engine-shaft, is 6 ft. wide, the greatest part saving for dressing, yielding 15 cwt. per fm.; the lode in the same level west is 5 ft. wide, yielding 10 cwt. per fm.

CHURCHSTOKE.—We are still going on sinking the engine-shaft, and are completing the road.

CRETETOWN.—The lode in the 12 fm. level, east of the engine-shaft, is about 10 in. wide, with good stones of copper. The 12 fm. level west has been driven 2 fathoms this week, lode from 2 to 3 ft. wide, composed of capel and mangan, with stones of copper ore and lead. In No. 3 level the lode is 2 ft. wide, mostly capel, with spots of copper and lead. The stopes east of the winze, in the back of No. 3 level, is yielding $\frac{1}{2}$ ton of ore per fathom. In the stopes west of the winze the lode is 1 ft. wide, yielding some good ore. There is no change in No. 4 level since my last report. I am sorry to say that our dressing has been interrupted, owing to the frost. I am expecting a vessel every tide for a cargo of ore. The engine has not yet arrived.

DEVON AND COURTESAY.—The 70 fm. level end is a little improved since last report, being spotted all over with ore. The pitch in the back of the 60 fm. level will turn out about 1 $\frac{1}{2}$ ton of good ore per fm.

DEVON CONSOLS WEST.—The men have made more progress in sinking the engine-shaft the last fortnight than they had done since they have been in the hard ground; the branches in the shaft are greatly improved, and producing more lead, from which we are taking good specimens. This day a practical mining agent came on the mine, and examined the stuff taken from the shaft, and was highly gratified with the appearances of the mine; and he has not the least doubt when these branches drop in with the lode, of making large deposits of ore, from the present indications.

DUNNSLEY WHEAL PHENIX.—We are desuing the eastern level; the branches dipping towards the lode produce tin. We are now about to commence clearing up the old adit level. The ground in the cross-cut still continues the same as last reported. From the stopes we continue to raise tin.

EAST CROWNDALE.—Our tribute pitches at this mine continue to look well; there is a fine lode in the pitch west of the winze, worth full 60f. per fm. We have all our ore dressed for next sampling, except that from the south lode, which is very hard for dressing, and I cannot say whether it will be ready by Friday or not; if not, we had better sample again that day month, when we should have, in all probability, 30 or 35 tons more for sale. I have weighed off about 47 tons, and the ore I refer to would be about 8 tons, which, if it can be got ready, will make our present sampling 35 tons; and if not, that with the ore of two months' breaking from the western pitch, with what we may get from the eastern end, would make us about what I have stated for a sampling in a month's time. We have not taken down any lode in the eastern end this month, but shall do so next week; there is good reason to believe it still holds good. No alteration to notice in the 47 west. Our shaftmen are putting things to right in the shaft, after fixing the new plunger lift, &c. I hope to be all ready for sinking by next Saturday (this day), and to continue without interruption.

EAST POLGOOTH.—The ground in the 30 cross-cut is a little easier. The lode in the 30 end east is 4 ft. wide, a very promising lode, more promising than last week. The 20 west, on main lode, presents a better appearance than ever I saw it before; lode 3 ft. wide, in a beautiful stratum. I see no alteration in Leely's lode. In the 20 cross-cut south we cut some lode since in the 30 cross-cut; it is 1 ft. wide, not nearly 26 fms., ground much the same; we expect to hole it to the 20 cross-cut this month. The masons are getting on favourably with the building of the engine-house.

EAST TOLGUS.—The ground in the cross-cuts is much easier, and better progress is being made in consequence. The Redruth Consols and North Buller lodes have come together in the adit end east, and appear to have crossed. The lode in the end is 15 in. wide, producing a little ore. Redruth Consols lode, where it crossed, is poor. There is a pitch working on ore in the back of the adit at 10s. 17f.

EAST WHEAL GEORGE.—The lode in the engine-shaft, sinking below the 32 fm. level, is 3 ft. wide, composed of capel and quartz. The lode in the 32 fm. level west is about 1 ft. wide, composed of peach, mangan, and at times good stones of ore. The stopes in the back of the 12 fm. level, east of shaft, are yielding good stamps' work.

EAST WHITE GRIT.—There has been no alteration in Lawrence's shaft for the past week, neither in the tribute pitches. The ore in the 20 fm. level goes down.

ESGAR LLEE.—The lode in the 12 fm. level above adit, east of Harding's rise, for the last 6 ft. in driving is not looking quite so well as when last reported on, it being a little disordered at present. The lode in the rise above is quite as good as ever, also in the stopes in the back of the deep adit. The caunter lode in the shallow adit, east of Morgan's winze, is composed principally of gossan, friable quartz, and mangan, and, on the whole, has a promising appearance. The weather has again set in with great severity, and our wheel is quite frozen up, and our dressing operations suspended for some days past.

EXMOOR ELIZA.—The winze in the bottom of the 36 fm. level is without alteration since last report. In the 50 fm. level west we have commenced cutting into the lode from the south wall, and have already intersected branches, orey throughout—set to six men, at 7f. 10s. per fm. In the 50 fm. level east the lode has been holed by a slide, and a cross-cut will have to be driven; before doing so, however, it will be advisable to take down the branch of caunter lode mentioned in my report to the last meeting, which will be done by four men. The new lode is looking well, and promises something extraordinary.

GARVEG.—The east side of the lode in the 20 fm. level north is about 1 $\frac{1}{2}$ ft. wide, with a little lead; the west side of the lode is about 3 ft. wide, with a small branch of adit. The tribute pitch in back of this level, on the west part of the lode, is producing good lead, and improving to the bottom of the level. The south shaft sinking from surface is about 14 fms. deep, and where, from all appearances, we have intersected an east and west lode; as soon as this shaft is communicated with the 20 fm. level, we shall commence driving east and west on the course of this lode. We shall have a few tons here for the next sale.

GORN LEAD MINES.—The weekly report shows that steady progress is making in carrying forward the deep adit, so as to strike the lode under the new ore ground. At the eastern part of the mine, in the shallow level, they are sinking a piece of ground down through to the back of the deep adit for a shaft. In the western part of the mine the men commenced sinking a winze, with good stones of ore. The men on the 18th inst. began to take down the south part of the lode, which was left standing; the lode in this place produces 1 $\frac{1}{2}$ ton of lead per fm. The dressers cleaned about 1 $\frac{1}{2}$ tons of ore in the week, and 6 tons of marketable ore have been sent to Newtown, as was also the case last week.

GREAT CRINNIS.—We have nearly completed the smithay and carpenter's shop which are put up in as cheap and convenient a way as possible. The masons are busy about the engine-house. The ground is much improved in the end driving north of Daniel's shaft. The tributes continue to raise a little ore.

GREAT TREURENE.—I have put two men to rise on the course of the north branch in the old adit; the branch is about 8 in. wide, composed of mangan, spar, and rich iron-stain. I have also cleared up an old working on the central branch, and found a branch of tin, varying in size from 1 to 3 in. wide—it is rich enough, all but solid. I have ordered the men to stop for another week, when we shall be able to go on with the rest of its continuance. We are also breaking a little tin in the central branch; it is very rich, but small in quantity at present.

GREAT WHEAL BADDERN.—The lode in the 20 fathom level, west of Sunderford, is still very large, and producing good work for tin. We have put eight men into the lode, where we shall be able to get plenty of work for the stamps. The lode in the 20 fm. east from Burgan's, is 6 in. wide, producing a little lead. The lode in the 20 fm. west above the 30 is 1 ft. wide, composed of lead and mangan. We have begun to

sink a winze below the 30, where the lode is 15 in. wide, good work for lead. The lode in the adit west is 2 ft. wide, composed of gossan, spar, and mangan, and letting out a little water, which indicates our getting near the caunter lode, where we have every reason to expect an improvement. We sunk 3 fm. 5 ft. in the new shaft last month, and if the ground continues as at present, it will take us about two months more to communicate to the rise above the 30. The stopes and tribute pitches are looking much the same. We expect to have about 2 tons of tin ready for the smelting-house by Wednesday next.

HENNOCK.—The engine-shaft is now sunk under the 50 fm. level 9 fms., and ground still of the same favourable appearance. The 50 fathom level south is now driven 10 fms. 3 ft. from shaft, where we have just taken down a part of the lode, which we find to contain good stones of lead, and now intend to cut it through, and drive on its course, when by next week I shall be able to report on its general character; our having now cut lead 7 fms. nearer the shaft than it was in the 40 fm. level shows that the lead ground is dipping fast in that direction. In the 40 south the lode continues to be very regular, with well-defined walls, producing some good stones of ore. I have been obliged to abandon the winze sinking under the 40 south, in consequence of foul air, and have put the men to rise in the back of the 40. The 50 south is without any alteration. Harris's winze, sinking under the 30 south, is now down 4 fms. 3 ft.; the lode is about 3 ft. wide, very regular, producing saving work. In consequence of so many men having left, we are at present several short in the different bargains.

HILL BRIDGE CONSOLS.—In Barclay's shaft the lode is improved; it produces more yellow copper, as well as malleable, since last week. At Bridge lode we are rising and sinking to communicate to the adit as fast as possible. The cross-cut is going on with all speed.

HINGSTON DOWN CONSOLS.—The lode in Morris's shaft continues to produce some saving work for copper ore: the lode in Dodge's winze is still very large, but I regret to say, is not so productive for ore as last reported on. The lode on the 55 fm. level, east of Dodge's winze, is, I am glad to say, improved, worth at present about 3 tons of ore per fathom. The stopes in the back of the 55 fm. level are not so productive for copper ore as for some time past, the lode being composed principally of gossan. The stopes in the back of the 45 fm. level are without alteration. The sinking of Hitchins's shaft progresses satisfactorily. The lode in the 55 fm. level, west of said shaft, produces occasionally good stones of copper ore.

HOLMBUSH.—The ground in Hitchins's engine-shaft is a congenital light blue killas, and so is the ground in the 145 fm. level cross-cut south of the shaft; the lode in the diagonal shaft, sinking below the 145, is 15 in. wide, composed of soft spar, prian, and stones of rich copper ore, and opening ground that will set at a moderate tribute. The 145 fathom level east we have for the present suspended, and put the mine to stop; in the 145, west of the diagonal shaft, we are still in the cross-cut, with moderate ground, which we are pushing on as fast as we can to get through it, in order to see the caunter part of the lode. The ground in the 132 fm. level, south-east of the diagonal shaft, is soft; but no branch as yet intersected. The lode in the 120 fm. level, east of the cross-cut, is 2 ft. wide, producing 2 tons of ore per fm. The lode in the 110 fm. level east is 4 ft. wide, producing 5 tons of ore per fm. The lode in the 100 fm. level, west of Wall's shaft, is 2 $\frac{1}{2}$ ft. wide, producing 1 $\frac{1}{2}$ tons of ore per fm. The ground in both cross-cuts north and south of Wall's engine-shaft, in the 124 fm. level, is moderate. The tribute pitches, on the whole, are producing a fair quantity of copper ore.

KESWICK.—At Brandley, the 20 fm. level north is worth 6f. per fm.; the stopes in this level is worth 3f. per fathom. The lode in the 30 fm. level is producing stones of ore; the stopes in this level is worth 25f. per fm.; in the 30 fm. level south the stopes is worth 10f. per fm. At Thornthwaite, the end in the 37 fm. level, driving under the gossan lode, is worth 2 cwt. of ore per fm., and improving. The tribute pitch in Borrow Mine is worth 10f. per fm.

LEEDSTOWN CONSOLS.—Our engine-shaft is down 17 $\frac{1}{2}$ fms. below the surface; when we have sunk it 2 $\frac{1}{2}$ fms. more we shall be able to fix our tyre-lift below the adit. Some of our men at work in the adit having left, we have had some delay in driving in replacing them, but we hope to let the water down by Saturday next (to-day). The engine-house is raised to a sufficiently high level to admit of our getting the bob-on. We should have finished by Saturday next, had we not had such severe weather. If nothing intervenes to prevent us we shall be ready to have in the engine on Wednesday next.

LEWIS.—Praed's lode in the 90 fm. level, east from tin shaft, is 2 ft. wide, worth 12f. per fm.; west it is 20 in. wide, opening good tribute ground; the north lode in this level, east from tin shaft, is 18 in. wide, opening tribute ground; this lode in the 80, east from Praed's shaft, is disordered by a cross-course, and not so good as when last reported. In the 70 fm. level, east from Praed's shaft, it is 18 in. wide, producing 5 tons of ore per fm.

LEEDSTOWN CONSOLS.—Our engine-shaft is down 17 $\frac{1}{2}$ fms. below the surface; when we have sunk it 2 $\frac{1}{2}$ fms. more we shall be able to fix our tyre-lift below the adit. Some of our men at work in the adit having left, we have had some delay in driving in replacing them, but we hope to let the water down by Saturday next (to-day). The engine-house is raised to a sufficiently high level to admit of our getting the bob-on. We should have finished by Saturday next, had we not had such severe weather. If nothing intervenes to prevent us we shall be ready to have in the engine on Wednesday next.

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LEEDSTOWN CONSOLS.—Our engine-shaft is down 17 $\frac{1}{2}$ fms. below the surface; when we have sunk it 2 $\frac{1}{2}$ fms. more

THE COPPER TRADE.

SIN.—As the actual standard of copper in the ore, divested of all its ambiguity, possesses considerable interest at the present moment, I continue my quotations—

March 3.—Quoted, quantity of ore, 3283 tons; fine copper, 190 tons 2 cwt.; money, 23,714. 8s.; average standard, 1644. 9s.; average produce, 61%.

It should stand thus:—Quantity of ore, 3283 tons; fine copper, 229 tons 2 cwt.; money, 23,714. 8s.; average standard, 1211. 18s.; average produce, 61%.

March 10.—Quoted, quantity of ore, 4032 tons; fine copper, 261 tons 18 cwt.; money, 31,149. 8s.; average standard, 1611. 6s.; average produce, 61%.

Should be:—Quantity of ore, 4032 tons; fine copper, 301 tons 1 cwt.; money, 31,149. 8s.; average standard, 1211. 18s.; average produce, 7%.

March 17.—Quoted, quantity of ore, 3559 tons; fine copper, 257 tons 19 cwt.; money, 29,172. 9s.; average standard, 1547. 4s.; average produce, 61%.

Should be:—Quantity of ore, 3559 tons; fine copper, 296 tons, 13 cwt.; money, 29,172. 9s.; average standard, 1159. 10s.; produce, 7%.

I should not be correct in following the suggestion of "M." (Chesterfield) in calculating the average standard of copper in the ore—the surplus is on the copper, not on the ore, is derived from various sources, and should be added to the metal. There is no real surplusage on copper ores; they are delivered in bars of 3 cwt., seven of which are called a ton; whilst the ton in Wales delivered to be smelted is about 22 cwt. He is all wrong in saying the higher standard is given for low produce ores, and the lesser standard for high produce ores, on account of the difference in the surplus of each. The variation of standard on account of produce or per centage of copper is a mere calculation on the returning charges, or cost of smelting ores of different produce. As 55s. per ton is deducted from all ores indiscriminately, and as it is evident that the expense of smelting ores of 10 per cent. is greater than that of 5 per cent., inasmuch as after the first melting you have twice the amount of impure metal to bring forward, the purchasers give such higher proportionate standard for the low produce ores as this difference in expense amounts to.

I, however, must fully agree with your correspondent, that the surplus rises on the low produce, though not in exact ratio, as the habitudes of different kind of ores render them more or less accessible to influences. Your correspondent will, perhaps, scarcely credit me, when I assure him that on my stating the substance of what his letter corroborates on this subject to a partner in a large smelting-house, it was treated with derision.—*Ab hoc uno discere omnes.*

THOMAS IRVING HILL.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, March 24, 1853.

ENGLISH IRON.		per Ton.	ENGLISH COPPER.	
Bar and bolt a.	—	£9 10 0	Tile, 14 to 28 lbs. a ... ton	135 0 0
In Wales a.	8 10 0	— 9 0 0	Tough cake a.	135 0 0
In Liverpool a.	—	— 9 0 0	Sheathing and bolts a. ... lb.	0 1 3
In Staffordshire a.	—	— 10 0 0	Sheet a.	0 1 3
Sheets, single a.	—	— 13 0 0	Bottoms a.	0 1 4
• double a.	—	— 14 0 0	Old a.	0 1 1
• Hoop a.	—	— 12 0 0	Yellow Metal a.	0 1 1 1
• Rod, round a.	—	— 11 0 0	Wetterstedt's Pat. Met. + cwt. 1 16 — 1 15	
Nail rod, square a.	—	— 11 0 0		
Rails (Wales) b.	—	— 8 15 0		
(Staffordshire) b.	—	— 10 0 0	Pig. p. ton. 24 10 0 — 25 8 0	
Railway Chairs, Clyde b.	—	— 5 0 0	Sheet. — 25 10 0 — 26 10 0	
Fig. No. 1, Clyde b.	—	— 2 13 8		
3-5ths No. 1 & 2-3ths No. 3 2 13 6	—	— 2 13 0	FOREIGN LEAD. 6	
No. 1, in Wales c.	—	— 4 0 0	Spanish, in bond p. ton	—
Scotch Pig No. 1 in London	—	— 3 15 0	ENGLISH TIN. 6	
Cold-blast, No. 1 Foundry	—	— 6 10 0	Block. p. cwt. 6 2 0 — 6 3 0	
Charcoal bars	—	— 14 10 0	Ingots. — 6 2 0 — 6 3 0	
Stirling's Patent Pigs, Glasgow	—	— 3 12 6	Bar. — 6 2 0 — 6 3 0	
Toughened Pigs	—	— 6 0 0	Refined. — 6 3 0	
Ditto	Wales 4 0 8 — 4 5 0		Grain. — 6 9 0	
FOREIGN IRON. 6			Fine grain. — 7 0 0	
Swedish	11 0 0 12 0 0		Ditto bars. — 7 2 0	
Russian CCND.	—	— 17 0 0	Ditto granulated. — 7 4 0	
Indian Charcoal Pigs, in London	—	— 6 0 0		
FOREIGN STEEL. 6				
Swedish kg, nominal.	—	— 20 0 0	FOREIGN TIN. 6	
Ditto faggot	—	— 10 0 0	Banca. p. cwt. 6 0 0	
On the spot	p. ton	— 22 5 0	Straits (unascertained). — 5 18 0	
To arrive	—	— 22 5 0		
ZINC.			TIN-PLATES. 6	
In sheets d.	p. ton	30 0 0	IC Charcoal p. box. — 1 15 0	
Terms.—a, 1/2 per cent. dis.; b, net; c, 3 ditz; d, 1/2 per cent. dis.; e, 2 ditz; f, 1/2 ditz; deliv. in Liverpool 10s. per ton less.			IX Ditto. — 2 1 0	
The SCOTCH Pig-Iron market, after having reached 55s. cash, has receded to the present rate, 53s. for mixed numbers, with a quiet market—buyers at 52s. 6d. cash.			IX Coke. — 1 7 0	
IN MANUFACTURED IRON there is no change since last week.			IX Ditto. — 1 13 0	
SELTZER has been quiet this week; prices quoted 22d. 5s.			Canada plates a. ton	—
LEAD is easy at the present quotations.				
TIN is without alteration.—TIN PLATES are rather dull.				
The dearness of freight affects most descriptions of metals at this moment.				

GLASGOW.—In our iron market, pigs are firm at late quotations. The demand for bars continues good, and there are large orders in the market for rails, both on home and foreign account.

MINES.—The uneasy feeling which prevailed throughout the city in regard to foreign affairs on Monday and Tuesday, had its influence upon mining, as well as upon almost every other description of stocks, and the consequence was that large numbers of shares were offered for sale without finding buyers. The market has since rallied a little, and for some species of stock there has been a fair demand. Owing, however, to the uncertain state of the copper market, lead mines are rather the most in favour. At last week's sale of copper ores, the standard was down upwards of 6d. in the week, and 3d. in the month. Still, with the short supply of ores, and the very small stock of copper the smelters have in hand to meet the fresh demand for the new coinage, we do not anticipate any great fall in the price at present. But there is a question, and an important one, too, for the mining interest to consider, and that is, whether the copper mines of Jamaica will not, in a few months, send more ores into the market than was ever received from Australia. The most extraordinary reports are in circulation as to the richness of the Metcalfe Mine, described as almost a mountain of copper; one lode is said to be 5 ft. wide of grey ore, yielding 70 per cent. of copper; many other rich lodes have been opened, and although allowance must be made for the colouring given to all mining reports, it is quite certain to believe that in a very short time 350 tons of rich ores have been raised, and are now ready for shipment. The shares, upon which 11d. has been paid, are 12d. prem., but none were ever offered to the public. In America, the copper market is much higher than it is here; and in respect to lead, the large consumers being out of stock, the "Yankees" are trying to "bear" the market by offering small lots. In home mines, there has been a fair demand for Seton, West Seton, Trebarvah, Keswick, and Herodsfoot, but few sellers found. Great Alfred firm, at 40d. to 42d.; North Basset, 12d.; East Bassett in request, at 30d. to 35d.; East Russell, 16d.; North Pool, 31d.; Seton, 24d.; West Seton, 21d., and in good demand; Cupid, 8d.; Trebarvah sought after, at 9d. to 10d.; North Damself, 33s. to 35s.; Callington, 5d. to 6d.; Alfred Consols, 18d. 10s. to 19d.; Uny in great request, at 15d. to 17d. 10s., the mine holding out more than ordinary chances of success; in Keswick, a good business has been doing, at 9d. to 10d.; Trebarvah, 6d. to 6d. 10s.; East Caradon, 2d. 10s. to 2d. 15s.; East Gunnis Lake, 2d. 5s. to 2d. 7s. 6d.; South Tamar, 7d. 15s. to 7d. 17s. 6d.; East Tamar, 3s. to 4s., and largely dealt in; West Providence, 5d. to 5d.; Buller, 125d., ex div.; Bassett, 60d. to 61d.; West Caradon flat, at 33d.; Tremayne, 27d.; Merlin, 4d. 10s. to 4d. 15s.; Trevelyan, 3d. 10s. to 4d.; Wheal Carpenter (South Sydenham), 10d., and a good business doing; Herodsfoot, 19d. to 20d.; Pen-y-Gelli, 27d. to 28d.; the first sale of lead will soon take place at this mine, and should the lodes at the next level prove equal to the expectations raised from their present appearance, and which will soon be proved, there will be a great rise in these shares, 6d. only in number. Cubert, 2d. 10s. to 2d. 12s. 6d.; Cwm Darren, 15s. to 17s.; the first sale of lead has just taken place here, and the ore brought 22d. 5s. per ton; they have 70 tons of copper ore also for sale, and the levels in the mine will soon be under the rich course of ore seen above. Molland has been in request, at 3d. to 4d., in consequence of a good improvement in one of the lodes; gold has also been discovered in small quantities in the gossan. Marke Valley shares have been in request at 5d.; Condurrow, 12d. to 13d.; in the 70 fathom level the lode is worth 40d. per fathom. Tamar, 4d. to 4d. 10s.; Tincroft, 11d. 10s. to 12d. 10s.; Eagar Lee has advanced to 25d.

In the Metal Market, there is a decided re-action, arising from sundry causes—partly from the high rate of freight in the export thereof, occasioned by a scarcity of vessels, and also the extreme prices that have of late ruled the market for metals of every description. We have shown in another column that it is our belief that they have seen the top price, and will now retrograde. At the Swansea Ticketing, this week, the fall in the standard of copper ore was considerable, and if a similar reduction continues there and in Cornwall, manufacturers and others will naturally expect to obtain Cake, Tile, and Sheeting at lower rates than they have been forced to submit to for some months past.—Although Tin maintains its price, the sale of it, as well as of Tin Plates, has been dull, and Lead is not saleable at present quotations.—In Spelter, less business is transacting

than for some time past.—Manufactured Iron is steady; Scotch Pig obtainable at 52s. 6d. per ton, nett cash.

In the Bullion Market.—Mexican and South American dollars, 4s. 11d. per oz. Bar silver containing gold, all gold above 5 grains in the pound to be paid for, 5s. 12d. per oz. standard. Bar silver without gold, 5s. 12d. per oz. standard. Bar gold, 77s. 9d. per oz. standard.

The sale of copper ore at Swansea, on Tuesday last, showed a considerable drop in the standard; and on Thursday, at the ticketing in Cornwall, the number of tons sold were 3411 for 20,380. 8s.; the produce being only 52s. standard, 160d. 11s., showing a fall of nearly 4s. in the standard since the corresponding sale in last month, and equal to a reduction of 8s. per ton on the ore.

Newtonards, Foxdale, Penhale Consols, Keswick, Trebarvah, Goginan, Froncog, Pantwynwyn, Penyhrinbiau, Westminster, Maesysfa, Milw, Pantyffrith, Fron, Fawng, Bodewyddan, Black Craig, Dylife, and Llechwedd Du, have sold little ore.

Wheal Enys, Wheal Owles, Rocks and Treverbyn, Rix Hill, and Lewis, have sold bold tin.

The directors of the Devon Great Consols Mining Company, at their weekly board meeting, on Thursday, declared a dividend of 12,28s., being 12s. per share, out of net profits, arising from sales of copper ores sampled in the months of Dec. and Dec. last. After payment of the same, there remains in hand a balance of 29,948. 2s. in cash, or bills not at maturity, and reserved fund, applicable to the general purposes of the company.

At the Wheal Jane meeting, on the 22d of Feb., the accounts showed—

Balanc last account, 1087. 7s. 2d.; mudi, gossan, and tin sold, 164. 8s. 11d.; carriage, &c., 145. 3s. 9d. = 1289. 19s. 1d. = Mine cost, merchants' bills, 1257. 11s. 11d.; lord's dues, 109. 9s. 11d.; dividend of 1s. 10s. per share, 334. 0s.; leaving balance to next account, 1487. 8s. 1d. A dividend of 30s. per share (256d.) was made. It was resolved to subdivide the shares into 512ths. Silver gossan had been sold for about 150s., on which the labour cost had been paid, but owing to the weather had not been weighed off, making the balance in favour of the adventurers about 300s.

Wheal Proctor has declared a dividend of 1s. per share.

At the Wheal Jane meeting, on the 22d of Feb., the accounts showed—

At a meeting of the Wicklow Copper Mines, in Dublin, on Thursday, a communication was read from Mr. Barnes (the local director), announcing the discovery of a new lode of sulphur and copper ore, of great extent and value.

At the Callington Mines' meeting, on Saturday, the accounts showed—

Balanc last account, 11,567. 1s. 7d.; mine cost (three months) to end Jan., 2114. 16s. 2d.; interest and discount, 234. 6s. 9d. = 3294. 4s. 6d.—By silver-lead sold, 972. 9s. 11d.; black tin, 377. 19s. 4d.; copper ore ditto, 330. 9s. 10d.; calls, 1259. 0s.; leaving balance against adventurers, 633. 6s. 4d. There was a parcel of copper ore ready for immediate sale, which would reduce the balance by about 350s. Cuptooleock and James reported on the state and prospects of the mine, and were born out by Mr. Percival Johnson. It was recommended to abandon the Callington lead lode, and devote the whole resources to developing Kelly Bray. [A full report will be found elsewhere.]

At Weston Mine general meeting, on Tuesday (Francis Morris, Esq., in the chair), the accounts showed.—To calls received, 1659. 1s. 1d.; by general expenses, &c., 282. 14s. 4d.; working costs, 323. 1s. 1d.; office expenses, &c., 282. 14s. 4d.; and a balance in favour of the adventurers, 127. 9s. 4d.

At Trebretton United Mines' general meeting, on the 16th inst. (F. M. Ball, Esq., in the chair), the accounts showed—Mine cost, merchants' bills, &c., 326. 11s. 6d.; and a balance in favour of the adventurers of 175. 1s. 6d. A call of 2s. 6d. per share was made. The committee of management were re-elected, with the addition of Mr. E. J. Smith, and the code of rules and regulations recently prepared for the government of the Britannia Mining Company were adopted. These regulations are published in the *Mining Guide*.

At Wheal Fanny quarterly general meeting, held on Tuesday (G. T. Mansell, Esq., in the chair), the accounts showed—To calls received, 6000. 0s.; interest and discount, 55. 10s. 3d.; loans, 200. 0s.; labour costs, 324. 11s. 1d.; by purchase of a steam-engine, 309. 1s. 1d.; books, stationery, &c., 67. 17s. 11d.; office expenses, &c., 282. 14s. 4d.; and a call of 2s. 6d. per share, 158. 8s. 1d.; leaving balance against the mine, 157. 5s. 7d. A call of 2s. 6d. per share was made, and from there being between 6000d. and 7000d. worth of tinstuf at surface, and a like value of copper ore, with 20,000d. worth of ore in sight, a dividend may be expected as soon as the machinery is erected. The mine is expected to hold a first-rate position. [A full report will be found elsewhere.]

At Curvannan Mine meeting, on the 8th inst., the accounts showed—

Balanc last account, 209. 11s. 1d.; mine cost for Dec., 309. 1s. 1d.; Jan., 263. 10s. 1d.; by balance from Nov., 209. 11s. 1d.; and a balance in favour of the adventurers of 175. 1s. 6d. A call of 2s. 6d. per share was made. The committee of management were re-elected, with the addition of Mr. E. J. Smith, and the code of rules and regulations recently prepared for the government of the Britannia Mining Company were adopted. These regulations are published in the *Mining Guide*.

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At the Coed Mawr Pool Lead Mining Company's bi-monthly meeting, on Saturday, the accounts showed—Amount of cost-sheets for January and February, 99. 4s.; leaving a balance in hand of 387. 0s. 11d., in addition to the reserve fund arising from the sale of shares expressly appropriated for extended operations

NOTICES TO CORRESPONDENTS.

MINING LAWS.—SIR: I perceive by your remarks, in the Journal of March 19, that it is the intention of Mr. Collier, during the present session of Parliament, to introduce a bill of mining laws on the Cost-book Principle for home mining—I do not, however, see why not for the whole British empire or possessions. Now, it is my anxious wish, if possible, to move into communication the persons who are respective names and signatures. Mr. Collier, Mr. S. Smith, "R. P. H." and "Argus" (of Truro), represent, that a just, simple, and practicable code of mining laws may be the result, to the pride of Great Britain, as the sincere desire of "K. Q. X. GNOME."

GREAT CRINNIS MINE.—SIR: For the information of "Q. Z." I beg to say that an engine has already been purchased for this mine, and that the buildings to receive the same are progressing with all possible speed, and will soon be finished. If "Q. Z." had read the weekly reports of the mine, which appear in your Journal, he would have learnt as much. Any further information on the subject may be obtained at the office.—R. C. MANUEL. *Austinsfriars, March 24.*

TEWDRWLS AND TREVETHICK MINE.—A Shareholder wishes for some information respecting the present state and prospects of this mine; and asks why reports are not published, that those interested may know what is doing?

SIR: I should feel greatly obliged by any of your correspondents furnishing me with any information they may possess respecting an undertaking entitled the Swiss Alpine Silver-lead and Copper Mining Company.—C. W.: *City.*

ROUND HILL MINE, SHROPSHIRE.—We are requested to state that the agent's report, inserted in our account of the meeting in last week's Journal, which we attributed to Capt. Rawson, was from Capt. Barratt, of Bat Hole Mine. Capt. Rawson, although the managing agent of Round Hill, was confined by illness at the time.

"Miner" (Camborne).—Sphalerite consists of soda, silica, alumina, and lime. It occurs in globular masses, which present a radiated structure, a pearly lustre, and a brilliant fracture. The fibres are flexible, and the surface of the globules may be scratched by the nail. It forms a jelly with acids, and fumes before the blow-pipe with exfoliation and intumescence. It occurs in the Faroe Islands and in Iceland.

"T. H. B." (Brompton).—We have not heard that the committee of baronets, further than a protest, have taken any ulterior steps with regard to their alleged claims to the minerals and mines of Nova Scotia.

"A Reader and Subscriber" (Birmingham).—From his intimate knowledge of the constitution and parties connected with the company, we concluded that our correspondents must have had some personal object to serve in obtaining through the Journal a public reference to the circumstances he referred to. If he be a shareholder in either company, why not attend the first meeting, and elicit the facts, when, doubtless, any irregularity in the management would be rectified.

"Subscriber" (London).—We believe a bill is very shortly to be introduced into the House of Commons, intended to remove the doubts respecting the application of the Cost-book System.

"J. G." (Thornhill).—It is not our practice in any way to discuss questions which are not within our province. Slavery is, no doubt, a great evil, but its abuse may be in a great measure mitigated by those who have the superintendence of the slaves. We do not presume to know whether slave labour will be employed by the company. They must, however, in justice to their shareholders, in order to prevent undue competition, endeavor to obtain operatives at as low a rate as compatible with the interests of the association they were elected to preside over. The Imperial Brazilian and St. John del Rey Companies are noted for the good treatment of their slaves, and it is a notorious fact that they would be unable to carry on their work without their services. Giving all due credit to the philanthropic motives which have actuated the observations of our correspondent, but little practical utility could be derived from quoting that question in our columns, which has been so ably discussed elsewhere with more propriety. Numbers of brokers advance money on shares in respectable companies, more especially if they are negotiable: the addresses of several will be found in our advertising columns.

"W." (Westminster).—Manganese is imported here from Germany, where it is found in a comparatively pure state. The Cornish ore of that kind contains several semi-metals, which render it impure and difficult to reduce, unless at a great cost.

T. JONES (Liverpool).—The great drawback to labour in Spain, and other Roman Catholic States, is the great number of saints' days and holidays. We are credibly informed that in the late Asturian Mining Company's concessions at Mieres, the average of 200 working days in the year was all that they could avail themselves of. As they had to pay their English operatives by the year or month, this made a sad item in the profits. We have likewise heard that even where work was absolutely necessary, it was requisite that the authorities and priests should receive a consideration.

The address of Messrs. Stenson and Co., the patentees of the welding hammer described in our last Journal, is at the Scrap Iron-works, Northampton.

"Calor" (Mertyn).—Castor, like other oils, is a compound of carbon, hydrogen, and oxygen, and the increase of viscosity is caused by the imbibition of a superabundance of the latter. There are means of deoxidizing it, and, consequently, rendering it more fluid; but we are not aware that castor oil has ever succeeded as a lubricator. We are not aware of the freezing mixtures used under Master's patent, but many are well known. Two parts of snow, or ice, and two of common salt, produces a temperature 5° below zero of Fahr.; one of sal ammoniac, two of salt, and five of snow, 7° still colder; equal parts of nitrate of ammonia and salt, and 2½ of snow, 25° below zero; five parts of muriate of lime and four of snow freeze mercury.

We shall be glad to hear from our St. Columb correspondent.

"Young Argus" (Tavistock).—The communication of our correspondent is too diffuse for insertion; and although Mr. Ennor may, in his opinion, have been somewhat unhappy at times in his remarks on, and prognostications of, the future fate of some mines, the enumeration of them, and in so personal a manner as "Young Argus" has done, can be of no public interest. He says Wheal Zion is in a situation which cannot be surpassed in promise to make a productive mine; in a fine clay-slate stratum, with immense bodies, particularly the champion one, with beautiful gossan and muriac in the backs, there is every expectation, in a moderately short period, of intersecting a rich course of copper ore; and should it not be found at the 30 fm. level, which for Cornwall is but a shallow depth, there is every chance at a deeper level. "Young Argus" also calls attention to Drake Walls, of which Mr. Ennor, on one occasion, said he had known the mine 40 years, but it never had produced anything of value, nor ever would. The mine is now becoming productive; and he calls attention to Mr. Ennor's communication in the *Minning Journal* of the 5th inst., in which he states that some masterly head and hands had been at work, and carried out plans which he had in vain suggested 30 years since. The writer expresses some surprise that if Mr. Ennor knew that a better system of operations would render the mine productive, why he should previously have condemned it as worthless?

SIR: In answer to Mr. P. Nisser's queries in last week's Journal, I beg to say I have seen gold attached to tin from a stream work in the parish of Lanivet, in Cornwall. It has also been found associated with tin in Carnon streams, near Truro; also in the parish of St. Endor, and at a place called Luney, near St. Austell.—GEORGE HENWOOD.

TREBURGET UNITED MINES.—SIR: Allow me to correct an error which appeared in a paragraph headed Wheal Ecle, in your Journal of the 12th inst., in which it is stated that that mine is bounded by Treburget United on one side, and by Old Treburget on the other, whereas both these mines are on the south side of Wheal Ecle. Treburget United occupies the enviable position of being immediately adjoining to the north of the justly celebrated Old Treburget Mine, which returned large dividends to the proprietors; and although Wheal Ecle joins the former to the north, and is likely to be a promising speculation, I cannot allow Treburget United to be denied the advantage of being the next neighbour of a mine which has proved so enormously productive as the Old Treburget.—J. O. MAYNE, FURSER.

RAILWAY WHEELS.—LOCOMOTIVE SAFETY-VALVES.—A correspondent enquires how it is that, with all our engineering experience on railways, the numerous fatal catastrophes which have happened, and that are still continually occurring, from locomotives, tenders, and carriages jumping off the rails, the flanges of the wheels remain the old narrow projection of not more than an inch?—Was this flange increased to 2½, or even 3 in., there is no necessity whatever for increased friction, as the bevel would prevent that, and it would only touch at one point. On laying the suggestion before a Government Inspector, his answer was that it would put the companies to great expense, in causing the necessity for altering all the present lines. This is considered but a lame argument, placed in opposition to life and limb; but at all events, with a flange of increased depth, we should travel with a much stronger sense of security.

Another correspondent, in calling attention to the practice of drivers of locomotives screwing down the valves to increase the pressure, states that the companies give the drivers premiums to save coke; and the officials shut their eyes to the fact, that to effect this, a pressure of 200 lbs. on the inch, if not more, is often used to get the steam to work expansively, and thus economise fuel. He strongly points out the glaring defects caused by directors trying to save money, where cannot be safely done, to pay for extravagances which should never have occurred.

CRAWDICK'S AND ERICSSON'S ENGINES.—Among the large quantity of correspondence on this subject which we receive weekly, and to a tithe of which it is impossible to find space even for comment, is one from Mr. Wm. Morshed, jun., of Liskeard, to the observations in which we would say a few words. The writer complains that Mr. Musket, in his communications instituting a comparison between the inventions, has omitted all notice of the wire regenerator, by which the amount of caloric necessary to work the engine is theoretically nil. Now, Mr. Musket was not describing the engine of Ericsson, only its principles and results; and whatever may be the boasted saving in fuel, we have no doubt (and we are supported by many observers in New York) it must prove a grand failure, for this "nil" of our correspondent involves the cost of a sufficient fuel to keep up the "nil" of our temperature in the lower cylinder at the expense of the metal. He proceeds to say that the date on which the principle of the engine is based is not that a quantity of air can have a compression [expansion] of 15 lbs. per inch, but that by using the heat over and over again, fuel only is required to make good that lost by radiation and leakage. Now, it is by the use of this fuel that the above pressure is maintained, and, therefore, both observations are correct as to the principle. We observe our correspondent has sent more than one communication to the *West Briton*; and while he appears anxious to support Ericsson's borrowed, and long-known application of a natural law, it is clear he cannot see the difficulties to be encountered, which we have more than once explained, and which we have never yet had contradicted. As to his observation on Craddock's engine, that the advantages and disadvantages of high-pressure steam are so well known that any improvement would stand on its own merits, we can only say that the writer can have but little practical experience of the difficulties and antagonisms which patentees have to encounter, and the more perfect the principle the more powerful the neglect and opposition. Did he know Craddock's engine, he would find that, if not new, as he terms it, the "chemistry of combustion," and the "physical properties of fluids," are employed in a more scientific manner than has ever previously been done.

In another communication from "A. S. K." (Bideford), on the same subject, after expressing much satisfaction at Mr. Musket's elaborate communication in the *Minning Journal* of the 5th inst., he suggests that a small steamer should be fitted with one of Craddock's engines, which should visit every port in the kingdom, a proceeding which he believes would make its merits known and appreciated, and bring it into general use. He considers, although much has been said and written, the engine itself has not been sufficiently made public, which is highly essential. And the exclusion of various machines from the Great Exhibition is strongly dwelt on by the writer, but for which we have not space.

J. C. (Swansea).—YES: Drs. Muspratt, Playfair, and Hofmann, mentioned in *Household Words*, are considered among the leading chemists now in England. The former is in Liverpool, and the latter two hold appointments in London.

DEVON BURRA BURRA.—"W. C." and other inquirers are informed that the engine (a new 60) is now being made by Messrs. Gill and Co., Tavistock, who are to erect it in five months from the date of contract; that the water-power is sufficient for extensive workings while the engine is being put up; and that at present rich piles of grey and yellow ore are on the ground, and being dressed. Those who have recently inspected the mine give the most favourable report of its character and productiveness. We understand that the meeting will be deferred for a short time, in order that the distant proprietors, some of whom resided out of the kingdom, may have the opportunity of being present; and that in the meantime further important operations will be greatly advanced.

S. T. O. (St. John's-wood).—West Tolpuddle Mine joins the North Pool and South Tolpuddle Mines on the south of east, and is not a quarter of a mile from East Pool, nor above a mile from Wheal Bassett; it is also immediately west of the Great Tolpuddle. Therefore the locality is unquestionably good; yet, although they have a steam-engine upon it, they are merely working to adit level, to keep possession of the sett while the lord allows them to do so.

Mr. T. I. Hill would be glad of a communication from Mr. Chesterfield.

A. J. (Bottle Hill) should send a proxy to the meeting; there and then is the time to suggest an impartial inspection of the mine by competent parties. We hear the concern well spoken of us to prospects, if it were more vigorously prosecuted.

"Enquirer" is informed that no sett can be divided into parts and separated from the general whole, without meetings specially convened for the purpose, notice being given to every shareholder, soliciting their consent thereto; and even then, whether separated into two, three, or four parts, each holder is entitled to his full proportion of shares, should he express such a wish. By offering this distribution fairly to all, we see no great cause to complain if the separation of ground is judiciously made.

"A Kenmare Shareholder."—We always do, to the best of our ability, and as far as our space will permit, give insertion to the communications of our correspondents, provided they treat on matters of scientific and commercial interest, and are couched in proper language. Our impression on perusing the one alluded to was, that it was an *ex parte* and exceedingly personal statement, quite unfit for publication; while the proper course for complainant to pursue was the one recommended in Notices to Correspondents in our last week's Journal; and we now, on further consideration, see no cause to alter our opinion.

an immense deal of damage to the workings, particularly the shaft, which had to be partially cleared and repaired before it was safe to send down any assistance. At about half-past four o'clock, Mr. JAMES DARLINGTON, the general manager, and a number of men descended, and leaving the dead for the time, proceeded to search for any who might still be surviving. By half-past five, 24 men and boys were brought out alive, having sustained most injury from the after-damp, and but little burned, but in a very exhausted state, one of them apparently dying. During the remainder of the day the whole exertions of the men were applied to repair the airways, that in case any did survive they might breathe a purer atmosphere, and by three o'clock on Thursday morning 32 bodies had been removed, and 26 more were missing, of whose fate there can scarcely be a doubt, as the after-damp (carbonic acid) was excessively powerful. Large quantities of bricks and timber were sent down to repair the stoppings, and the bodies were not removed until next day. An immense concourse of people assembled round the pit's mouth, and from the confusion which prevailed it was impossible to obtain correct particulars. Nearly all the medical profession of the neighbourhood was in attendance to render any necessary assistance. The cause assigned is the indiscretion of the under-viewer (THOS. JONES), who was not in the mine when the accident took place. Some repairs being necessary in the upcast shaft, he, without consulting Mr. DARLINGTON, reduced the furnace power, and slackened the ventilation; and, after the completion, it was raised to an immense heat, which fired the gas accumulated in the interim. It is, however, imperative that a searching enquiry should be made into this unusually painful and destructive accident; and in this case it is probable the truth will be arrived at, as in addition to the 60 who had just left the mine, and must know its condition, upwards of 20 endured the fiery ordeal, and are still living to give their evidence.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, MARCH 26, 1853.

In another column we give the particulars of the sales of copper ore for the quarter ending 24th March. This return shows a further decrease of 1351 tons, as compared with the quarter ending Christmas, in consequence of a falling off in the Cobre of no less than 1008 tons, and in the Santiago of 387 tons. The Irish, Welsh, and other mines and slags are much as they have been. To show how large the decrease has been within the last four years, we particularise as follows, viz.:

Quarter ending	Tons.	Amount.
June, 1849	14,925	£206,296 8 0
September, 1851	11,066	135,376 9 6
December, 1851	7339	99,708 15 0
March, 1852	6918	88,307 14 6
June, 1852	9055	130,679 9 0
September, 1852	9211	139,949 0 6
December, 1852	6479	105,378 12 0
March, 1853	5119	91,622 11 6

With such results, and the fact of a falling off likewise at the Cornish ticketings for the quarter of 2004 tons of ore, equal to 200 tons of cake copper, the rise in the standard and price of metal is easily explained. Some of our correspondents attempt to prove this is owing to other causes as well; yet, while we give insertion to their communications, we by no means acquiesce in the correctness of their ideas or judgment, but adhere to our oft expressed opinion, that whilst the supply is not equal to the demand (which we contend is the fact), a greater competition exists among the smelters to purchase, in order to keep their connections good and customers supplied, and not drive them from their warehouses to seek their requirements from any rival company elsewhere.

The standard at Swansea on Tuesday last gave way to a considerable extent, and by the recent sales in Cornwall we are led to conclude that it has seen its highest rate; and will now retrograde, let us hope, to a more steady and fixed, as well as remunerative, rate, such fluctuations as we have witnessed in the last half-year being neither healthy or beneficial to any of the interests concerned.

The next quarterly sale at Swansea consists of 1436 tons of ore, some of it very rich; and in Cornwall it commences with no less than 4531 tons, on Thursday next. We shall resume the subject next week.

The quarterly sales of copper ore at the Swansea ticketings, to end of March, having terminated on Tuesday last, and being the smallest as to tonnage and metal since the year 1856, we present our readers with full details thereof, viz.:

Tons.	Amount.
January 18	1104
February 1	1079
March 1	1460
March 22	1536
Total	5119

Being the produce of the following mines and slags:—

FOREIGN.	Tons.	Amount.
Cobre	1145	£30,348 18 0
Cuba	563	11,091 1 0
Copiapo	402	8916 11 0
Montreal	235	3317 1 0
Dhurude	14	157 2 0
Australian	19	885 9 0
Keweenaw	99	5287 15 0
New Zealand	83	1627 17 0
Total	2600	£84,534 15 6

IRISH.	Tons.	Amount.
Knockmahon	999	£13,081 17 6
Berehaven	681	8465 11 0
Ballymurtagh	357	1910 10 0
Cronebane	45	404 8 0
Tigony	3	142 11 6
Lackamore	44	233 0 0
Connor	9	430 12 0
Total	2138	£24,699 10 0

WALES, ETC.	Tons.	Amount.
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flues in connection with gas stoves; when using a common chimney it would generally be found necessary to "throttle" the opening, and thus, while sufficient draught would exist to carry off the products of combustion, the heat would be retained. In the Polytechnic Fire, as patented by himself and Mr. DEXRIS, the strong prejudice of Englishmen in favour of an open fire and ventilation were both attained. They had a small burner always alight a short distance up the chimney; and in case of a downward draft, by turning a small valve, a flame 6 in. long would be produced, and the current instantly corrected. He believed the enquiry was proceeding in the right direction, and hoped to see the time when a gas proper for fuel would be discovered, which would render gas fires as cheerful, economical, useful, and as general as gas lights and coal fires are at the present time.

Mr. ASHPITEL made an important communication: he said the subject was interesting, as having occupied much of the time of the late JOHN SYLVESTER before his death. An invention of his would shortly be made public, which would realise many of Mr. RUTTER's suggestions. He could not then enter into details, but he might say that it would dispose not only of the azotic impurities, but also the aqueous vapour, which appeared to have been overlooked by the previous speakers. This could be done without a chimney, by a process analogous to filtration. The peculiar "irony" smell common to almost all stoves might be got rid of by having two thicknesses of iron and water between, and to compensate for the check to radiation thus caused, diffusing surfaces called "gills" are employed. The meeting was also addressed by Messrs. STRODE, MEADE, the chairman, and other gentlemen, and a vote of thanks was passed by acclamation to Mr. RUTTER.

It is at all times to be regretted whenever any differences appear to exist or misrepresentations are put forth with reference to mine adventures. During the past week or ten days considerable excitement has been manifested on the Stock Exchange, and in the City, in consequence of the formation of the COOSHEEN MINING COMPANY, and the issue of the shares. Some of the reports as circulated were calculated to be highly prejudicial to the company. The Committee of the Stock Exchange, with a laudable endeavour to elicit the facts, have instituted a thorough enquiry. It must be gratifying to the projectors or directors to find the result to be that of perfect exoneration from blame on their part; while we cannot but hail with pleasure a sequence which, while it justifies the course pursued, is far from being, as we were led to apprehend, detrimental to the mining industry of Ireland, in which we have ever taken so much interest. It is hardly necessary to advert to the mine itself. Several reports, from personal visit and observation, having already appeared in our columns, while we have no hesitation in expressing our strong conviction as to the value of the sett. It only requires active and economical management to render it one of the "gems" of Erin's Isle, and we trust that the result will prove that capital fairly employed in Irish mines will, in the end, show that they are equally deserving of attention as those of foreign climes.

It may be remembered that, on the first account of the intelligence of gold being discovered in California, several companies were formed in London for the purpose of working the auriferous veins in the then newly-acquired territory of the model republic. Their shares were eagerly sought after, and many companies, which now no longer exist, disposed of their worthless scrip at a considerable premium. It was anticipated, both by directors and shareholders, that it was only to proceed to California, and once arrived at that "El Dorado," all was comparatively easy, and gold could be had by merely picking it up. This delusive idea was in a great measure fostered by the reports put forward by the several agents of Colonel FREMONT, and the too great faith accorded to their statements, as well as to the gallant officer's title; this, we are aware, has been decided in his favour by the Commissioners, and an appeal has been made to the Supreme Court at Washington against the decision. From our knowledge of American law, we perceive the question will be decided in the Colonel's favour; but then, how will they by ordinary course of law dispossess the squatters? These remarks may be foreign to the present subject, and we merely allude to them for the purpose of substantiating the fact, that all practical men who have gone out in several companies, give their opinion not only that the title is valueless, but that the land is comparatively so also. The absence of information raised doubts in the public mind; and it was stated at one period that all gold mining schemes were no better than bubbles. We have attentively watched the career of each company; we have always, though at times we have stood almost alone, deprecated the attempts of our contemporaries to condemn these adventures in "one fell swoop." Where they are honestly conducted they shall always receive our support; and although the employment of capital in our home mines may afford a better scope for investigation, yet, when mining adventure is legitimately and honestly conducted abroad, it should be protected from that invidiousness which is too apt to jump at conclusions, and form conjectures which are based upon probabilities. Each company, as it has appeared before the public, has given a fair and honest account of its stewardship to the shareholders; and although there have been numberless and unforeseen difficulties to encounter, in every case it has been shown that, as far as circumstances would admit, they have been favourably surmounted. On Saturday last the QUARTZ ROCK MARIPOSA GOLD MINING COMPANY held their first annual meeting; and, looking to their accounts, they having been established over a twelvemonth, we are surprised at the small amount which has been expended by them, 8003L 11s. 9d.: of this, 3238L 10s. 8d. is invested in machinery, and 1000L deposited on account of the agreement for lease with Colonel FREMONT. The salaries in England had amounted to 262L; while the preliminary expenses, including brokers' commissions, office rent, &c., have been 1060L 17s. 2d. The report of the directors, as well as the proceedings of the meeting, will be found in another column: we make no comments on them; but there is every guarantee to the shareholders that their interests will be ably and honestly managed, when the well-known name of ERSKINE presides, assisted by the able co-operation of three of our most eminent citizens, who have, by the numerous votes of their compatriots, been called to fill the highest honours that the greatest city in the world can bestow on those they deem most worthy.

Although great results have been obtained from Australia, yet hitherto we have received no information as to the working of the auriferous deposits by combined action, aided by the appliances of science and machinery. On the first intelligence of the discovery of gold in the Australian colonies, it may be remembered that an association of gentlemen connected with the colonies formed a company for the purpose of working in their locality they might find suitable for that purpose in Australasia. When they issued their prospectus, they distinctly stated to the public that they possessed no location in any portion of that vast continent, but in their intention was to find some tenable site on which to commence operations. With this view they dispatched their staff in March last, under the superintendence of Mr. HARDING, a gentleman who had acquired great experience in the Brazils. It appears that, up to the latest time this gentleman had discovered no locality in which he deemed it feasible to erect the company's machinery, although he was still prosecuting his search; and it was hoped that, when more familiarly acquainted with the geological and mineralogical features of the colony, he will be successful. Probably by this time he may be in operation, should he be approved of the locality favourably reported on by Capt. Williams. The company, which is incorporated by Royal Charter, held their first annual meeting on Monday last; their balance-sheet was laid before the meeting, when it was shown that the greatest economy had been exercised in the management of their affairs. At their first starting 2000 shares had been reserved for the colony; and as a proof of the estimation in which they were held, it is only necessary to state the fact that these were immediately taken up. The geological features of Australia are greatly dissimilar to those in other quarters of the globe, and persons having otherwise competent experience are liable to be deceived; and this was ably shown by the CHAIRMEN, who proved that the wealth of the Australian Agricultural Company was better known here than in the colony, and the results of assays of gold and earth from their property on the Peel River showed that they were in possession of a valuable tract of land. At the same time he observed, without in any way wishing to say anything derogatory to Mr. HARDING, his great knowledge of the formation of lodes, and the usual features of mining in Brazil, had probably misled him here, and, perhaps, caused him to show a too great over-caution. It has been too often urged, that we are bound to admit sometimes very justly, that directors are too guine, and by reckless speculation squander the capital entrusted to

their charge, but we have seldom heard that they have been charged with too rigid economy and prudence. Such, however, was the case with the AUSTRALASIAN GOLD MINING COMPANY, although we are glad to find the directors, through their chairman, Mr. H. BUCKLE, were fully able to rebut the frivolous charges alledged against them. We will make no further comment; they refused to take any remuneration for the services until the shareholders had a mine; they have a local board in Sydney, Possessing as they do the confidence of persons in the colony, there can be but little question, that when a desirable locality is to be found, with cheap labour, so as to return a profit to those who have embarked their capital in the undertaking, it will be secured for the association. The Australasian Gold Mining Company may not, superficially looking at past operations, show such flattering prospects, but they are not the less secure. At the same time, it may be enquired if any company there has done more, or even as much.

THE COST-BOOK SYSTEM—ITS PRINCIPLES AND PRACTICE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to offer, through the medium of your Journal, a PREMIUM OF TWENTY GUINEAS for the best Paper, descriptive of the Cost-Book, its Principle and Practice. The leading points to be—

1. The Cost-book System, general in its application.
2. The singular appropriateness of the Cost-book System in the conduct of Mining Adventures.
3. A Code of Regulations for the equitable management of Mining Companies.

4. The present anomalous state of the Law, with reference to Mining.

5. The alterations necessary in the Law for the limitation of liabilities in Mining Partnerships.

I propose that the papers be sent, under seal, prior to the 1st of May next, to "Cost-book," to the Mining Journal Office, 26, Fleet-street, London, with a distinctive motto affixed, enclosing also an envelope containing real name and address of writer.

The papers will be referred to a jury of five gentlemen, whose names will be published in the Mining Journal, on Saturday, the 23d of April.

The Prize-paper to be published in the Mining Journal.

Winchester-buildings, City, March 24.

T. A. READWIN.

THE METAL TRADES OF BIRMINGHAM.

FROM OUR CORRESPONDENT.

MARCH 24.—The general trade of the town and district still continues in a healthy state. The recent accounts from Australia have not, however, been such as to justify the manufacturers in making on so extensive a scale as they hitherto have been accustomed to do for that market; and the demand for tin and copper has been during the past week comparatively limited. Indeed, very few sales have been effected by the metal dealers; although in the prices of copper there has been a downward tendency. There has not been any circulars issued announcing a reduction in price, but sales have been made below the quotations of the last meeting of the smelters, and under the expectation that a great and permanent reduction will take, the manufacturers are holding back their orders. In the gun trade very considerable activity prevails, and the Government contractors are daily expecting to receive orders from the Board of Ordnance for a few thousand guns for the regular service. The men in the various departments of the trade are working full time, at advanced wages, and the great rise on the raw material has been the only drawback on the prosperity of the masters. The iron trade is steady, and prices have been, on the whole, well maintained during the past quarter, although some sales have been effected at a reduced figure. Pig-iron is now selling at 4L 10s.; and orders for bars will not be refused at 10L. What the decision of the next quarterly meeting may be, cannot with certainty be anticipated; but the general belief is, that the continental and American orders on the books, and the general prospects of the trade, will be held sufficient to justify a continuance of the quotations of last quarter; however individual necessities, or other particular circumstances, may render a departure from them occasionally necessary. The glass trade is exceedingly brisk: at the works of Messrs. Chance Brothers and Co., the orders for every description of glass are said to be greater than at almost any former period, and with every appearance of increased demand. All the principal manufacturers, including Messrs. Winfield, Hardman and Co., Potts, Elkington, Jennings and Bettbridge, &c., are actively engaged preparing for the forthcoming Dublin Exhibition, and some splendid specimens of the choicest workmanship are even now ready for packing. Of the public companies of this district, few, perhaps, promise more satisfactory results, in proportion to the extent of its operations, than the "Rhidal United Silver-Lead Mining Company." To-day a general meeting of the proprietors was held at the offices of the company, Benetts-hill, for the purpose of considering the propriety of affording the public an opportunity of participating in the advantages of the undertaking. A report from the engineer was presented to the meeting, from which it appears that the miners have discovered the main lode, and that the works can now be carried on with a certainty of success. It was ultimately resolved to issue 2000 shares to the public; the affairs to be conducted upon the Cost-book Principle. The accounts, which indicated a balance in hand, having been passed, the proceedings terminated.

The general Share Market during the past week has been exceedingly dull, having been operated upon most unfavourably at the beginning of the week by the state of the London market. There was a downward tendency in all securities up to this day, when a partial revival of confidence caused an advance on most of the shares of the leading lines.

COOSHEEN MINING COMPANY.—(From a Correspondent).—It is too well known to our readers to need further comment, that it is at all times our most anxious desire to promote the prosperity of the mining interest, and, consequently, that it affords us pleasure whenever we are enabled to communicate the satisfactory progress of public undertakings tending to advance the industry and the resources of the country generally. Actuated with these sentiments, it was, therefore, with considerable regret that we had, as public journalists, to allude in our last Journal to certain unfavourable reports in respect to the proceedings of the directors of this mine, and which were so much the more discordant to our own feelings, inasmuch as we had little expected so lamentable an event, and indeed had predicted a result totally the reverse of that before us. Unfortunately, those reports have been confirmed during the course of the present week; and it becomes our painful duty to record the issue of the proceedings brought under the cognizance of the Committee of the Stock Exchange, in respect to the alleged irregularity of this company, and the names in which the shares had been allotted, or rather not allotted, but appropriated to themselves, as directors, to the lessee and his co-participants, as for the purchase of the lease, &c., and to their own private friends, which appropriations absorbed nearly one-tenth of the whole, for allotment to the public. With the above limited issue of shares, it was certainly no difficult task to command the market, and by locking up the shares belonging to their body, and the re-purchase of the few public allotments, to raise the price in the market to any quotation the operators might think proper to establish. In furtherance of this object, the sale of the company's shares was not attempted, either at par or at constantly advancing premiums; but, on the contrary, purchases to the extent of nearly 3000 shares, at high nominal prices, were made in the House, on time bargains for the account which shares, it was subsequently found impossible to deliver, inasmuch as that number had never been issued to the public. The price was made at 3L 11s., and 5L per share premium; and, in order to a settlement of these bargains, it became requisite to apply to the Committee of the House to admit the stock of the company, and to appoint a settling day for such purpose. Under these circumstances, strongly opposed by those members of the company who were likely to be sufferers by the operation, who it appears were principally junior members of the House—indeed, the chief traffickers in shares of this description. In order to pass the accounts of the company, and to take the complaints of members of the House into consideration, the Committee of the Stock Exchange appointed Tuesday last for the investigation of its affairs; and although the whole body of the directors, with the projector, and the entire staff of the company, together with their solicitor, were present, and conducted their case in a most able manner, yet after a thorough investigation, which occupied two entire days, the Committee came to the decision that a settling day (Wednesday next) should be nominated for the settlement of transactions between parties, but that without the privilege of "buying in," as against the sellers; at the same time recommending private and equitable adjustments. The effect of this decision is, that the differences must necessarily form a matter of arrangement, and that the sellers will have a chance of liquidating claims upon comparatively moderate terms, instead of 5L or upwards per share, but the operations have been carried out as originally intended. Reviewing the whole of these proceedings, we can avoid the expression of our regret that such an issue should have attended the affairs of so respectable a body of directors, of so promising a mine as the one in question; but we cannot omit renewing our recommendations to all future public companies—viz., that they be framed upon liberal and strictly honorable principles; that the consideration and conditions be at all times set forth in the prospectus; and that the successful working of the mines, rather than that of the market, constitute the desirable object of their several formations.

NORTH CARADON.—The committee of this association have adopted the principle, a most wise one, of refusing prospectuses to promiscuous applicants, but to those who leave their name and address they are at once forwarded, either by post or hand. This has had the effect of getting rid of mere premium-seeking applications, and reducing the allottors to *bona fide* parties. The list was closed on Thursday, and the letters of appropriation will be issued, we understand, in the course of this day. The shares have been sought for generally by persons conversant with mining, and those residing in the locality of the property.

SOUTH AUSTRALIA—ITS STATE AND PROSPECTS.

[FROM OUR OWN CORRESPONDENT.]

ADELAIDE, Nov. 14.—The half-yearly report of the directors of the South Australian Mining Association* will be read by your subscribers with interest. You will see that the announcement I made to you in my last of the stoppage of the works, and letting the water into the mine, is confirmed. I also hazarded a conjecture some months since, that this mine would not again pay more than 5L per share per quarter as dividends; this is also confirmed by the actual determination of the directors, as stated in the report; and in the unsatisfactory prospects of the mining labour market, it is a very agreeable announcement to the shareholders that there is money enough to pay the 5L dividend for the next two quarters. Captain Roach announces a lode of malachite in the 50 fathom level 10 feet wide, and one in the 40, composed of red oxide, 12 feet wide; in fact, the mine seems to be becoming more prolific in riches the deeper they go. In the statement of accounts, 85,948L are given as undivided profits; this balance will probably be considerably increased by the continued rise in the price of copper in England; discount, exchange, and interest are set down at 9280L 6s. 7d. This proves two things—first, how profitable the Burra Burra account is to the Bank of Australasia; and secondly, what a saving it would be to the company if they were their own bankers; and, really, very little coin would be required for that, for if they were in a position to issue paper money of their own to pay current expenses, their notes would be circulated just as readily as those of the banks, as every one would know that the Burra paper would be present; and by the regular steam communication now established the proceeds of shipments of copper could quickly be sent out in coin. At all events, if the Burra Burra belonged to English proprietors, with London merchants as directors, I feel convinced such a monstrous item as 9280L for discount and interest, in the management of such rich property, would never have been incurred. Burra shares have risen considerably; they are now 168L, and none offering. The letting takes place this week; it will be unimportant, for as yet there is not the slightest prospect of a return of the miners. If any one can get gold out of the ground, surely a regular miner will; and I cannot help thinking that copper mining will, for want of skilled labour, be longer in attaining its former state of active productiveness than almost any other industrial pursuit. Let us hope for the best.

Next, about our Echunga diggings. In the first month (October) 700 licences were paid for; on the 1st November these expired, and we watched the renewal of them with interest, as it would be a practical test of the value of the field if the men thought it worth their while to pay the license fee of 30s. again. The first week of this month 30 were renewed, and in the second week 90 more. It is quite impossible to form any accurate guess as to the quantity of gold produced, as it does not pass through the commissioner's hands, the diggings being close to town (only 22 miles), which enables the men to bring it in with them on Saturday night, when they visit their families; the diggers being, besides, anything but communicative as to their success, for fear of being "rushed," as it is here called—i.e., a number of other men surrounding the profitable ground they may have obtained the gold from. There is, however, no doubt but that a great deal of gold has been obtained: there are between 200 and 300 tents permanently fixed in the neighbourhood. Stores, butchers and bakers' shops, blacksmiths, &c., are regularly established on the ground, all which would not be the case if the men were not doing well; but when we recollect that from 600 to 700 men have remained constantly at work during October (the very month when we expected every man would have left for Victoria), then we cannot help coming to the conclusion that they were not alone doing well, but finding it sufficiently profitable to take from them any desire they might have had of again visiting the Victoria gold-fields. When I last wrote to you the largest nugget found weighed about 8 or 10 dwts. I have seen several nuggets lately weighing respectively 2, 3, and 4 ozs. In the same way with the washing stuff; at first it was spoken of as containing so many pennyweights per load, now the men, in the most natural manner, only speak of so and so many ounces to the load. It is from these disjointed facts we must form our opinion of the Echunga gold-fields, until some decidedly rich spot is hit upon, which I believe it will be one of these days, and then it will be easier to guess at the probable value of the discovery. From the many parcels I have seen and heard of, I, however, confidently believe that several thousands of pounds worth have already been extracted. As far, then, as our evidence goes, the existence of a South Australian gold-field is, as Guiot would say, "*un fait accompli*," and my prognostications on the subject, which appeared in your Journal of the 26th June, have so far been fulfilled. The extent of the auriferous deposit, and its abundance, remains yet to be proved. I can report that it is extending: at first all the labour was concentrated on "Chapman's Gully"; now we have, in addition, two more—"Feltus's Flat" and "Windlass Hill," each discovery richer than the preceding one. What if a golden gull were to be dropped upon by the "prospectors" (men who try the ground all about) one of these days, richer than any in Victoria? It would be absurd to say that that was impossible: there are many hundred gulches and hills in the stringy bark ranges, and by the few hundred men our population can now spare for the work will it be a long time before all of them are thoroughly examined. But I cannot say I am very sanguine in wishing for a great gold-field, excepting it be for that feeling natural to every community, to try and equal, if not excel, our neighbours. Victoria is in a most deplorable state; from the latest accounts, the Government seems to be powerless. The greatest misery seems to prevail amongst the thousands who are thrown every day on its shores; and the great majority of the settled inhabitants appear to be decided losers, instead of gainers, from the gold discoveries. South Australia is dear enough to live in at present, but it is nothing in comparison to Victoria; and whatever discontents we in Adelaide have to put up with, they are a thousand times worse in Melbourne. As far as our experience goes, we will be much better off without a prolific gold-field in our own territory. We are getting more gold into the place as it is from Victoria than we know what to do with, and if we could get all our broad acres ploughed up, sown, and reaped, we might safely leave all the gold digging to our neighbours, without grudging or envy.

The subject of the protection to be granted to the local banks, to enable them to work out the Bullion Act, has occupied the attention of the Legislature, and within the last few days an Act has been passed, and received the Lieutenant-Governor's assent, giving the Government power to make and issue gold tokens of uniform standard purity of 22 carats, and at a fixed value of 3L 11s. per oz. I have seen one of the coins, although none have yet been issued. The first coinage will be in 20s. pieces, and they are very creditably executed. You will perceive that the price (3L 11s.) is the same as the original price fixed by the famous Bullion Act, No. 1. The Legislature, in passing another Act on the subject, did nothing more than just sufficient to enable the banks to work well out of the former: and as all the gold deposited and passed through the Assay Office between this and the 28th Jan. next, when the Bullion Act expires, will be converted into these coins, and made legal tender, it will enable the banks, if necessary, to issue them in redemption of their extra circulation of notes after that date, supposing they should not have English-coined gold enough for this purpose. Most people, however, think that any further legislation was quite unnecessary. The price of raw gold has risen in Victoria and Sydney very considerably; there are a great many purchasers in the field, and large quantities of sovereigns are coming out in every ship; the consequence is, the price of gold is becoming equalised with its intrinsic value, and the amounts deposited in our Assay Office by our diggers are, as you will see from the table below, gradually falling off. In fact, buyers on English account give now, in Adelaide, 3L 11s. and 3L 12s. for gold dust, for transmission to England, which, of course, does not go through the Assay Office. These 20s. tokens will disappear from circulation as fast as they are issued; the banks will naturally rather issue sovereigns at 3L 17s. 10d. than these coins at 3L 11s. per oz., and the great object of the banks now is to ship off to England as much as possible of the assayed gold, which has been delivered to them at 3L 11s. per oz. from the Assay Office, on which they will make a large profit. The royal mail steamer *Sydney* will, therefore, take home a very large amount. The Bank of South Australia, in particular, having stood the brunt of the Bullion Act, will now also reap the largest share of the profits; the shareholders of that bank will have a statement laid before them at their next annual meeting such as they little dreamt of; and the acting manager (Mr. Tinline) is allowed, on all hands, to have evinced an uncommon degree of prudence and just discri-

* By the arrival of a copy of this report, by the Overland Mail, we were enabled to publish the particulars in our Journal of the 19th February.

mination in the very trying times of the current year. The following is from the last official return, dated 18th October:—

Bank of South Australia	£166,825	£261,940
Union Bank of Australia	112,562	241,961
Bank of Australasia	37,764	167,310

The *Martin Luther*, with 1500 tons of copper ore on board, belonging to the Patent Copper Company, which sailed from here for Swansea about three weeks since, encountered very heavy westerly gales, and bore up for Launceston, where she arrived safely, and will probably discharge 300 or 400 tons into another ship. The great rise in copper will be a great profit to the Patent Copper Company, and make up for many of the annoyances they must, in common with us all, put up with.

The royal mail steamer *Sydney*, with the mails of the 3d of August, arrived here on the 3d of November; she had great delays at the different coaling stations. She is described as a fine sea-boat, but great complaints are made by the passengers as to her cabin accommodations, and in particular the mean table kept for them. You will see by the dates that we derive no practical benefit in point of time from these steamers; and a resolution has been passed by the Legislative Council here, expressive of their disapproval of the manner in which the contract has been hitherto performed, which was forwarded to Sir John Pakington. The prices charged by these steamers are excessive; and if they fancy they will make their line popular by giving passengers bad accommodation, and bad and insufficient meals, the company will soon find that they are mistaken, for no passengers will go in them. Everybody is talking of the princely Peninsular and Oriental Steam Navigation Company, and what a pity it is they did not get the contract by the Cape line as well as by Singapore. The *Sydney* will be here on her homeward voyage in about a fortnight.

To give your readers an idea of the traffic that has sprung up between the colonies, and the profits being made, I may mention, that the *Clarence*, a new steamer of 400 tons, and 80-horse power, lately arrived in Sydney from England, and which stood in (every expense paid on the day of sale) no more than 11,500*l.*, was sold by auction for 29,950*l.*! She is now plying between Launceston and Melbourne. Two steamers to run regularly between Melbourne and Adelaide are very much wanted: cannot the above price tempt some builders or steam navigation companies to send out half a dozen steamers for sale? they would sell readily, but they must be good boats—no rubbish.

The Council has passed a bill authorising the loan of 60,000*l.* for constructing the City of Adelaide and Port Railway, at 6 per cent. per annum. The money will be readily got here, as there is a good deal of money waiting for investment, and these railway bonds will form a very convenient medium for small investments, easily transferable. The following abstract of land sales is interesting, as showing the depth of depression in January, and the gradual rise and great increase latterly:—

January	£673	May	£1823	September	£10,378
February	1659	June	4156	October	16,866
March	2572	July	7270	November, not completed,	
April	1702	August	11,805	but larger than October.	

In Victoria, the Government are going to commence leasing blocks of land in the gold fields which have already been wholly or in part dug over, at a minimum upset price of 360*l.* per annum for each half-acre! and by auction; so that the English gold companies who have agents there will soon not be able any longer to say that the Victoria Government give them no opportunity to spend their shareholders' money.

His Excellency the Lieutenant-Governor has been pleased to direct the publication of the following regulations for lease by auction of such portions of the gold-fields as have already been wholly or in part dug over and abandoned. 1. Blocks of land applied for shall be clearly described, and applications shall be addressed in writing to the Chief Commissioner at the gold-fields. 2. After survey of the required blocks, public notice will be given, and descriptions of the lots open to lease will be posted up at the office of the Chief Commissioner, and at the office of the Assistant Commissioner, within whose district each lot may be situated. No lot will be offered at auction until one month's notice shall have been given in the *Government Gazette*. 3. Leases shall be put up to auction at the office of the Assistant Commissioner, in whose district each lot may be situated, at a minimum price of 360*l.* per annum for half an acre—viz., at the rate of 20 monthly licenses for each half an acre. 4. No lots shall be of larger area than 10 acres, nor of less than half an acre. 5. Ten per cent. deposit shall be paid at the time of sale, and the remainder of the purchase-money within one month. If the whole be not paid at that date, the lease and deposit will be forfeited, and the land will be open for selection on application within one month of the day of forfeiture, upon the payment of the highest sum bid at auction, less the deposit. 6. The term of lease shall be one year, but leases shall be renewable within one month of their termination, on payment in advance of the next year's rent. 7. Leases shall contain the usual covenants and conditions, and the usual clauses in favour of the Crown. 8. A list of the names of all persons employed or residing on each lot leased shall be furnished monthly to the Chief Commissioner, and a similar list shall be kept on the ground by the lessee or lessees, and shall be open for inspection on the demand of the Chief Commissioner, of persons acting under his authority. Each person resident on the ground shall also hold a monthly license, to be specially framed for gratuitous issue by the Government. 9. The Chief Commissioner, or his deputies, shall have free access to the grounds and premises occupied under these regulations, and shall have power to remove such persons as would be ineligible to hold an ordinary license to dig for gold."

I have to-day ascertained the weight and value of the 1*l.* tokens to be shortly issued from our local mint:

Weight of 1 <i>l.</i> tokens	135 <i>1/2</i> grains
" of a sovereign	123 <i>1/4</i> "

Difference in weight 12 grains (at 3*l.* 17s. 9d. per ounce, or 480 grs.) at 1*l.* 9*1/2* per grain = 1*l.* 11*1/2* d.

Value of South Australian 1*l.* tokens in London, 1*l.* 11*1/2* d.

Our Assay and Minting Establishment is now of quite a formidable size, occupying one whole side of the Government offices, besides new buildings. Although the Legislature begrudges Mr. Babbage his high salary, 900*l.* a year, all must allow that he was a great acquisition to the colony, just at the time he came out; and no one can either deny him the praise of having conducted his responsible department in the most efficient manner, and although upwards of 1,000,000*l.* sterling has already passed through the hands of his numerous assistants, not a penny has been lost, or just complaint been made.

Nov. 25.—The foregoing was ready written to have been posted by the *Formosa* steamer, belonging to the Peninsular and Oriental Steam Navigation Company: this steamer arrived here last week from Sydney during the night, and, to the very great disappointment of almost all the merchants and others, left again in the middle of the day, so that only a very few letters were got on board of her, and mine was not posted, as I was not aware of her being here, until too late. The reason assigned for her precipitate departure was her long detention in Sydney, and that her commander was anxious to reach Singapore by a certain date, in order to catch the *Bombay* steamer. As far as the steam postal communication is at present arranged, we are put to more inconvenience and uncertainty with regard to our correspondence than formerly; but the ensuing year, we hope, will see everything in good order, and regularly arranged.

Our overland escort arrived safely from Mount Alexander on the 20th instant, bringing the enormous quantity of 43,557*1/2* ozs. of gold, worth 155,000*l.*, the largest quantity yet brought down here. The Legislative Council have lately awarded to Mr. Police Commissioner Palmer a gratuity of 100*l.*, as a testimony of the high opinion entertained by the Council of his intelligence, energy, and perseverance, in establishing and successfully conducting, during the first three or four trips, this overland escort, which has been productive of incalculable benefit to the colony generally, as well as in an especial degree to the families whose relatives are at the diggings. Mr. Francis Dutton, the Member for East Adelaide, who initiated this vote to the Council, took occasion to pass a deserved eulogium on the many services performed to the colony by this valuable officer during many years' service. It is remarkable, that the arrival of these important escorts is now looked upon here as so much a matter of course as not to create any excitement or attention, so different from the demonstration made on the arrival of the first, of which I gave you an account.

The revenue of this province is improving; for the quarter ending 30th Sept. it amounted to 31,362*l.*—expenditure, 21,899*l.*; in addition to which the gold revenue was as follows:—

From escort fees on gold brought from Mount Alexander	£4198
From Assay-office for assaying gold	3381

Total £8079

Against which there was an expenditure on account of those two departments amounting to 5491*l.*

The Patent Copper Company advertise that they will re-light their furnaces on the 15th of next month.

Very fine nuggets, of 2 and 3 ozs. weight, of beautiful pure gold, continue to be brought into town from the Echunga diggings; the number of men increases daily; so also the issue of licenses, and there is no doubt they are doing very well. Our Government introduced a bill into Council this week for the regulation of digging for gold: the preamble set forth, among other things "whereas, gold cannot be legally raised from Crown lands or private lands." This at once created a storm, and fore-

seeing that the bill would be thrown out, it was withdrawn, and re-introduced without the objectionable clause, which was nothing more or less than an insidious attempt to re-introduce the royalty on the raising of minerals in this province. The amended bill is not so objectionable, and provides certain stringent regulations how gold digging is to be allowed here on Crown lands, which are to be proclaimed a gold-field by the Government, and in which proclamation such private lands are to be included, the owners of which may request it to be so done. But even on this latter point much difference of opinion exists, as a strong party in Council maintain that the proprietor of land in the colony has a right to be protected by Government, without the payment of any additional impost by way of a half of the licence fee, as the bill proposes; and it is likely it will not be passed.

The following are the particulars of the weekly deliveries of gold into our Assay office since the 5th of October:

Deposited up to 5th Oct.	£1,146,650	Nov. 2	3748 ozs.	13,309
Oct. 5	4986 ozs.	3	3340	11,859
" 8	3700	9	4145	14,716
" 12	2738	12	1856	6,583
" 15	6375	15	588	2,090
" 19	6355	19	1248	4,431
" 22	4841	22	2363	8,392
" 27	5418	19,237		
" 29	2934	10,418		

Total to date £1,352,402

This sum represents a total of 378,142 ozs. 11 dwts. 5 grs., and of this amount the three banks have obtained as follows:

Bank of South Australia	245,349 ozs. 1 dwt. 6 grs.
Union Bank	37,417 " 10 " 6 "
Bank of Australasia	45,375 " 19 " 17 "

This is a pretty good index to the popularity of these establishments.

THE COPPER TRADE.

PRODUCE OF THE PRINCIPAL COPPER MINES OF CORNWALL AND DEVON FOR THE QUARTER ENDING MARCH 24, 1853.

Mines.	Sales.	Tons.	Amount.
Devon Great Consols	5	6076	£49,725 18 6
Wheat Buller	3	3063	21,906 7 0
Wheat Bassett	3	1647	15,459 11 0
United Mines	3	2477	14,748 17 0
Consolidated Mines	4	1825	12,804 3 6
Carn Brea	3	1024	12,587 16 6
West Caradon	3	2464	11,828 19 6
Tincroft	3	1130	10,784 5 0
Par Consols	3	809	9139 13 6
Alfred Consols	3	715	8601 0 6
South Caradon	3	850	8082 17 6
Fowey Consols	3	1046	8015 18 6
North Roskar	3	1063	7740 8 6
North Pool	3	482	4418 6 6
Perran St. George	2	1346	7098 4 6
North Bassett	3	623	5755 9 6
South Frances	3	608	5581 12 0
Halamanning and Croft Gothic	3	763	5311 6 8
St. Day United	2	624	4679 1 0
South Tolgus	3	377	4529 5 6
Bedford United	3	674	4279 15 0
Wheat Seton	1	382	4221 3 6
Wheat Friendship	3	373	3698 4 0
Levant	2	299	3335 16 8
Phoenix Mines	1	508	3172 5 6
Treviskey	1	264	2955 10 0
Wheat Clifford	2	310	2822 1 0
Hington Down	2	360	2464 11 6
Holm bush	1	362	2339 4 0
Creagrawe	1	231	2318 2 6
Botallack	1	261	2290 1 6
Condurrow	1	335	2192 8 0
East Croft and Dudnance	1	411	2178 14 0
Marke Valley	1	429	2172 8 0
East Pool	1	262	2154 11 6
West Treasury	1	423	1592 12 0
Treasvean	1	214	1543 6 6
Great Wheal Alfred	1	157	1368 14 6
Wheat Arthur	1	124	1320 19 0
Wheat Crebore	1	185	1277 8 0
Pembroke and East Crinnis	1	144	1224 4 0
West Bassett	1	162	1193 13 6
Camborne Vean	1	102	1141 13 0
Gonamena	1	168	964 4 0
Tavy Consols	1	155	933 9 0
Great Wheal Alfred	1	189	898 18 6
Wheat Ellen	1	99	884 6 6
Wheat Speedwell	1	162	870 17 0
Dolcoath	1	162	847 0 0
West Alfred Consols	1	161	774 8 0
West Seton	1	73	764 0 0
Crane and Bejawsa	1	228	735 6 0
Trethellan	1	228	728 12 6
Comford	1	67	705 3 6
West Fowey	1	124	689 18 6
Callington—Kelly Bray	1	148	650 4 0
Wheat Franco	1	102	670 11 6
Providience Mines	1	166	636 1 6
Tywarhylle	1	44	615 10 0</

LANDS IN AUSTRALIA.—PARTIES desirous of ACQUIRING valuable FREEHOLDS in SOUTH AUSTRALIA, specially selected and purchased from the Crown prior to 1840, for WATER, BUILDING, AGRICULTURAL, and PASTORAL purposes, may OBTAIN such in small quantities, say from 1 to 100 acres, but not exceeding in the whole 1000 acres, through Messrs. Whittington, No. 2, New Broad-street, City, London. And a few APPROVED PARTIES may be ADMITTED, within the next week, to PARTICIPATION, by subscriptions of £150 each, to TRUSTEES, for the proposed purchase, on most advantageous terms, of a very valuable auriferous and aqueous discovery and property of 640 acres, in Australia, the locality and secret being confined at present to Messrs. Whittington.

WHEAL GRESSION, situate in the parish of Lezant, in the county of CORNWALL.—This mine was worked about 1831 by a small company of adventurers, who, with the assistance of horse power, sunk at the deepest point 20 fms., and extended the 11 fm. level, on the course of the lode about 70 fms., which laid open sufficient ground to produce some 600 or 700 tons of lead ore. At 20 fms. deep there was a level driven about 30 fms. on what was termed the copper lode; that lode is 3 ft. wide, producing throughout very good work for a crusher. In fact, there was a great many tons of good copper ore extracted from the contents of the main lode, and sold, by the simple process of the bucking-iron; this lode is 3 fms. north of what was termed the lead lode, their bearings, about north-west, underlie north-east lead lode 3 ft. in a fathom, copper lode 2 ft. 6 in., which will form a junction about 36 fms. under the present level. In addition to this, there is a parallel lode 15 fms. north that lead has been raised and sold from. Also 45 fms. north there is a lode that has been opened on the back underlying south 3 ft. wide, composed of the necessary ingredients to make up the word "kindly" with good stones of copper and lead ore, the same that is now being wrought on in the Wheal Sophia, which from the appearance of the lode, and quality of the ore that has been raised in their shallow operations, the most favourable results are anticipated; this lode will form a junction in the Gresson sett with the north underlays. Although there was such prospect for the future development of the concern, and so much lead and copper ore raised in the small quantity of ground excavated, without the lode or strata showing any cause why the same results should not be obtained if prosecuted, owing to the reduction in the price of lead, and failure in other business the company was connected with, they suspended the works for a while, which they never resumed. Now the term the sett was granted for has expired. Mr. R. H. Mitchel is open to grant the sett again on regular mining terms for 21 years.—For further particulars, apply to Mr. R. H. Mitchel, Greystone, Lezant, Cornwall.

THE DRIFT MOOR CONSOLS TIN MINING COMPANY, IN THE PARISHES OF MADRON AND SANCREED, CORNWALL.

Capital, £5000, in shares of £1 each, to be paid on allotment.

Conducted on the "Cost-book System," and without further liability.

BANKERS—London and County Bank, Lombard-street.

BROKER—William Morris, Esq., 80, Old Broad-street.

OFFICES,—WAINFORD-COURT, THROGMORTON-STREET.

This extensive and valuable mining property is situate in the neighbourhood of St. Just, in the county of Cornwall, in the immediate vicinity of, and in the same strata as, the Great Basset-did Tin Mine, and in one of the richest tin mining districts in the county.

Another mine in the parish of Sancreed (Boswarden) has recently "cut rich," to an estimated aggregate value of £30,000 and upwards.

The extent of the sett is in length about one mile of the lodes from east to west, and in breadth half a mile from north to south, and contains from 9 to 12 mineral lodes.

The grant of the sett is for 21 years, subject to the very moderate royalty of 1-20th. The plant and machinery already existing are in perfect working order, and operations may be at once commenced, without the least delay. The water-engine is complete; there is sufficient water-power throughout all seasons of the year. The mine is most advantageously situated, in a valley close to good roads, and within two or three miles of a smelting-house and the town and port of Penzance.

PROSPECTUSES, with the names of the directors and officers, and more detailed information, may be obtained at the offices, or from the brokers of the company, to whom applications for shares in the usual form may be made.

LADY GRENVILLE TIN AND COPPER MINING COMPANY, IN THE PARISH OF ST. STEPHEN'S, ST. AUSTELL, CORNWALL.

In 12,000 shares of £1 each.—To be paid on allotment.

To be worked on the "Cost-book PRINCIPLE."

DIRECTORS.

RICHARD DUNCAN, Esq., 43, Lime-street, City.

SAMUEL FENNEL, Esq., merchant, 14, St. Mary Axe.

W. E. COMMINS, Esq., Tavistock, Devon.

FRANCIS BOTTRILL, Esq., Porthkennel United Tin Mine, Camborne, Cornwall.

JOSEPH MARTYN, Esq., Wiveliscombe, Cornwall.

CONSULTING ENGINEER—James Martin, Esq., C.E.

SOLICITORS—Messrs. J. and O. A. Jenkyn, 3, Sherborne-lane, King William-st., City.

BANKERS—Messrs. Masterman, Peters, and Co., Nicholas-lane.

SECRETARY—Mr. W. B. Colling.

OFFICES,—3, SHERBORNE LANE, KING WILLIAM STREET.

This valuable mine is situate in the parish of St. Stephens, St. Austell, Cornwall, known to be one of the richest and best tin districts in the county, lying between the well-known Great Beam Tin Mine on the north, and the Great Polgoon on the south, which have paid, and are still paying, large profits to the shareholders; the Par Consols, the Great Howes, Old Crimian, and other mines in the immediate vicinity, have likewise proved to be the most productive mines in Cornwall, returning the largest profits within that limit of ground.

The directors have entered into a contract with the proprietors of this valuable and extensive mining property, to purchase the same for the sum of £4000; £1000 to be paid in cash, and the balance, £3000, in shares of the company.

The original sett consisted of about 70 acres, which was worked with profit by the late proprietors to the depth of 10 fms., with a water-wheel, but by the addition of the extra grant, giving now a vast area, as the map will show; it will, with such additional advantages, justify the erecting a steam-engine of sufficient power to carry out efficiently all works of the present extensive sett.

This mine also possesses peculiar advantages, from having an abundant supply of water running nearly through the centre, sufficient for dressing any amount of ore, with a full capability of driving a water-wheel for stamping and crushing; and, from its situation, within three miles of an excellent shipping port, and about the same distance from the smelting-house, with excellent roads, affording the means of cheap transit for the ores and all materials.

From the advantageous position of this sett, being in a district remarkable for its rich and abundant mineral wealth, the country congenial for the existence of lodes, and from the fact that tin of a superior quality has been raised only a few feet from the surface, with every appearance of improving as it goes down, together with the easy and inexpensive working-ground, there cannot be the shadow of a doubt but that this tin and copper mine will equal in produce, if not surpass, any other mine in that locality; thereby yielding to the shareholders handsome dividends. The sett is held on lease for 21 years, at 1-13th dues.

Prospectuses and further particulars may be obtained of the Secretary, at the company's offices.

MIXON GREAT CONSOLS COPPER MINE, NEAR LEEK, NORTH STAFFORDSHIRE.

CONDUCTED ON THE COST-BOOK PRINCIPLE.

Capital in 7500 shares.—Deposit, £s. per share.

DIRECTORS.

CHAS. HINKS, Esq., Drayton-grove, Brompton, London.

HENRY PARRISH, Esq., Moseley-road, Birmingham.

JOHN BRADBURY, Esq., Balsall Heath, Birmingham.

(With power to add to their number.)

AUDITORS—John Barker, Esq., M.D., Richmond, Surrey;

W. C. Morgan, Esq., St. Endor, Cornwall.

BANKERS—Messrs. Atwoods, Spooner, and Co., Birmingham.

MANAGING AGENT—Capt. William Bishop, Iपोन, near Cheadle.

PURSER—Mr. T. Lewis, shareholder, St. George's Chambers, High-st., Birmingham; and 33, ESSEX STREET, STRAND, LONDON.

This valuable and extensive sett, held at the moderate dues of 1-20th for the first two years, and 1-16th afterwards, under a lease for twenty-one years, is situated in a highly mineralised district, being about two miles from, and in the same strata as, the celebrated Ecton Mine, the property of His Grace the Duke of Devonshire, which yielded a profit of £50,000 per annum for a number of years. It contains six lodes, which have been opened on and found very productive. Upwards of £100,000 worth of ore was raised from them in the last working. They are all now in whole ground for a considerable distance; and some unexplored lodes have very recently been discovered to the west of these, cropping out at the surface. The ores are mixed oxides and sulphates, yielding from 18 to 30 per cent. It is proposed to erect a steam-engine of sufficient power to drain the mine to at least double its present depth. The capital requisite to do this, and to put the works in full operation, is estimated at about £7500, which it is proposed to raise by the issue of 7500 shares, to be paid for by a deposit, on application, of £s. per share, and the balance by three equal quarterly instalments.—Prospectuses, with maps of the mine, and sections of the underground workings, may be had, on application, to Messrs. Brunton and Son, sharebrokers, Auction Mart, Bartholomew-lane, City, London; or the purser, Mr. Thomas Lewis, shareholder, St. George's Chambers, High-st., Birmingham; to whom applications for the remaining shares must be made in the usual form.

WHEAL ECKLEY SILVER-LEAD MINE, ST. TEATH, CORNWALL.

In 5000 shares, at £1 each.—To be paid on allotment.

To be conducted on the "Cost-book System," at 1-16th dues, for a term of 21 years.

COMMITTEE OF MANAGEMENT.

WILLIAM ATTWOOD, Blandford.

WILLIAM PROCTER, Esq., J. P., Launceston.

JOHN CLENCH, Esq., Exeter.

BANKERS—Robins, Foster, and Boitho, Launceston.

BROKERS—Mr. T. P. Thomas, 75, Old Broad-street; Henwood and Molyneux, Leeds.

MANAGING AGENT—Capt. John Dale.

ENGINEER—Mr. W. H. Grey.

This very promising mine, held under a lease from the Hon. Lady Granville, was worked a few years since with abundant prospects of success, but, like many other good things in Cornwall, was abandoned simply from the fact that the proprietary was too poor to raise sufficient capital for the purchase of a steam-engine. This important desideratum will, however, now be supplied; and before Midsummer Day Wheal Eckley will be in full and profitable operation. At the time referred to, about £2000 had been expended on this concern, and shares had been selling out rapidly at a premium; but notwithstanding this apparent sunshine of prosperity, the mine was suddenly stopped, and lay dormant until the present enterprising company took up the sett. In bringing this promising adventure once more before the notice of the public, it will be important to state that the lodes of the celebrated Old Trebretton, out of which profits amounting to £150,000 have been realised, run direct through the property, and such being its favoured locality, its lodes already developed and rich in their character, and ready at once to be operated upon, stamps this undertaking with a sterling impress of a safe and profitable mining adventure; and Wheal Eckley will at once take the proud position of being one of the best lead mines in this important mineral district.

The payment of £1 per share will include the erection of a steam-engine, count-house, smiths and carpenters' shops, together with all suitable buildings, materials, labour cost, salaries, and every incidental expense of the mine, until the engine is put to work, which it is anticipated will be at Midsummer next, by which time it is fairly presumed the various lodes will be sufficiently developed, so as to place the concern on a dividend-paying list.

IN THE COURT OF THE COMMISSIONERS FOR THE SALE OF INCUMBERED ESTATES IN IRELAND.

COUNTY OF MAYO.—The COMMISSIONERS will, on the 24th day of May, 1853, at the hour of Twelve o'clock DUBLIN, set up and SELL, IN FIVE LOTS, BY PUBLIC AUCTION, the FEE-SIMPLE ESTATES of Barrow, East, Barroe Middle, Barroe West, Ballintubber, Ballymoyne, Carrowtubber, Carton, Cashel, Cloghane, Cloghilly, Derryanlogh, Gluigne, and Curragh, Cranmore, Underpark, Gaistrana, Gowlane, Langan, Lisfoty Park, Lismulge East, Lismulge West, Red Park, Rosknagge, Roskey Middle, Tonroe Village, Thannagh, Thannagh, Nine-arch Park, and Underpark, and the MANSION HOUSE and DEMESNE LANDS of Clonmore, situate in the barony of Costelloe, and county of Mayo, containing, in the entire, 8619A. 1z. 12d. statute measure, and producing a gross yearly rent value of £1333 19s. 11d.

Lot No. 1.—Comprises the lands of CLONMORE, CARROWTUBBER, CLONMORE MILLS, THE THREE BARROES, DERRYDORNEEN, BALLINTUBBER, TONREY VILLAGE, otherwise TONROE, THANNAGH, otherwise THUNNOUGH, otherwise TONNAGH, BOTINNY, and their sub-denominations, contains 2786A. 3s. 37s. statute measure, and produces a yearly rent value of £462 6s. 5d. Mr. Collis's valuation, made in 1850, was £2450 6s. 6d.; Griffith's, £434 12s. 7d.; and the poor law valuation, £450 4s.; and since then a considerable increase has taken place in the general value of land. The mansion-house and offices, which are in good tenanted order, and of which immediate possession can be given to the purchaser, are on this lot. The tenants are orderly and industrious, and pay their rents punctually. There are coal seams and iron ore on this lot. The probable amount of tithe rent-charge will be £10 10s. per annum, and the quit rent now payable will be redeemed.

Lot No. 2.—Comprises the lands of ROOSKEY and CLONLARHAN, and their sub-denominations, contains 2407A. 3s. 30s. statute measure, and produces a yearly rent value of £238 9s. 11d. Mr. Collis's valuation, made in 1850, was £332 14s. 6d.; Griffith's, £335 4s. 2d., and the poor law valuation, £276. The probable amount of tithe rent-charge will be £9 10s. per annum, and the quit rent will be redeemed.

Lot No. 3.—Comprises the lands of GOWLAWN and DERREYKINLOUGH, with their sub-denominations, contains 1518A. 2s. 23s. statute measure, and produces a yearly rent value of £65 4s. Mr. Collis's valuation, made in 1850, was £72 3s. 6d.; Griffith's, £86 8s. 7d.; and the poor law valuation, £67 4s. The probable amount of tithe rent-charge will be £1 10s. per annum, and the quit rent will be redeemed.

Lot No. 4.—Comprises the lands of LISMULGE PARK, CRUGALAHAN, otherwise CRAGGAH, CARRAGOOLY, CRANMORE, and part of CASHELDUFF, and their sub-denominations, contains 1911A. 1s. 2s. statute measure, and produces a yearly rent value of £313 12s. 3d. Mr. Collis's valuation, made in 1850, was £236 4s. 6d.; Griffith's, £239 10s.; and the poor law valuation, £237 4s. The probable amount of tithe rent-charge will be £5 per annum, and the quit rent will be redeemed.

Lot No. 5.—Comprises part of the lands of CASHELDUFF and GLANSTRANA, and their sub-denominations, contains 892A. 2s. statute measure, and produces a yearly rent value of £134 9s. 2d. Mr. Collis's valuation, made in 1850, was £89 18s. 10d.; Griffith's, £79 15s. 5d.; and the poor law valuation, £94. The probable amount of tithe rent-charge will be £2 19s. 9d., and the quit rent will be redeemed. There are coal seams and iron ore on this lot.

For particulars, apply to Mr. John Southan, mine agent, Batman's-hill, near Liverpool.

For further particulars apply to Mr. W. Kirk, auctioneer and valuer, mills, works, engineers, and general agent, 24, Princess-street, Manchester.

To BE SOLD, OR LET, BY PRIVATE TREATY.—THE WINDSOR FOUNDRY, EDGE HILL, LIVERPOOL, built by Messrs. Finley and Willey, and considered perfect in its arrangements, together with the extensive and valuable plant of machinery, &c., fixed ready for work, principally consisting of a TEN-HORSE HIGH-PRESSURE PORTABLE BEAM-ENGINE, with boiler and shafting complete, four powerful travelling cranes, a 10-ton steam and oil engines, three fire-brick cupolas cast in iron, drilling, punching, planing, testing, weighing, and other machines and articles, of which printed particulars can be had. The Dock Trust have rails along the line of docks communicating with the London and North-Western Railway Company, whose station and coal depots are within about 300 yards of the foundry, so that goods and coal can be carried by rail or at low cost. Rails are also on the adjoining premises, communicable with the company's, which, by arrangement, may be made available.

The size and convenience of the foundry, the extent of land adjoining, the extensive work-shops, the valuable and modern machinery, the low cost of coal, and the proximity to the railway (a portion of the yard being built over the tunnel), adaptably adapt it for large works. The Chepstow bridges were constructed at this junction. For further particulars apply to Messrs. Yates, Cox, and Co., iron merchants, Brunswick-street; or to Messrs. Williams and Jones, 28, St. James's, Liverpool.

BY PRIVATE CONTRACT.—A 40-horse condensing BEAM-ENGINE, in excellent condition; a 25-horse ditto ditto; a 50-horse MARIN CONDENSING ENGINE; a 48½-in. cylinder PUMPING ENGINE, and 2 boiler

20-horse CONDENSING BEAM ENGINE; HIGH-PRESSURE WINDING ENGINE, 38½-in. cylinder, stroke 5 ft. 3 in.; 8-horse HORIZONTAL ENGINE, and great many other steam-engines, boilers, &c. PLANING MACHINE, with planing 10 ft. long, 2 ft. 6 in. wide, and 2 ft. 6 in. high, by Spink and Co., Leeds; SCREW CUTTING LATHE, 12-in. centre, bed 15 ft., by Collier, Manchester; ditto ditto, 8-in. centre, on 10 ft. bed; large WHEEL LATHE, by Collier; IMPROVED PORTABLE DOUBLE-GEARED BORING AND DRILLING MACHINE, with bore up to 19 in. in revolving bright 8-in. column, exceedingly powerful, the fellow to this just erected at the works of the eminent Fairbairn and Sons; also a variety of other ENGINE BOILERS, TOOLS, UTENSILS, PLANT, RAILS, &c.—For particulars of which d

oan his Weekly Circular, which is sent to any distance by post on receipt of stamp for postage; and to W. Kirk, auctioneer and valuer, mills, works, engineers, and general agent, 24, Princess-street, Manchester.

NUNEATON COLLIERY.—VALUABLE AND IMPORTANT COAL AND IRONSTONE MINES, at STOCKINGFORD, near NUNEATON in the county of WARWICK.—TO BE LET, ON ROYALTY, THE MINES OF COAL and IRONSTONE, under about 70 acres, situated at Stockingford aforesaid; comprising the Two-yard Coal, the Rider Coal, the Blue Coal, the Slate Coal, the Tan Coal, and the Seven Foot Coal. These mines have been fully proved, are of excellent quality, and from their close proximity to the Coventry Canal and Trent Valley Railway, will be of easy transit to large consuming districts. The plant on the premises includes two engines, boilers, pit shaft, &c., may be taken at a fair value.

For particulars, apply to Mr. John Southan, mine agent, Batman's-hill, near Liverpool.

or to Messrs. Rawlins and Rowley, solicitors, Birmingham.

THE ENGINEERS, IRON SHIP BUILDERS, &c.—TO BE LET FOR A TERM OF YEARS, with power to purchase if desired, an ENGINEERING ESTABLISHMENT, one of the largest, and decidedly in the most advantageous situation in the United Kingdom for engine and iron ship building, being moderate and coal cheap. These works are fitted with machinery of the newest and most approved description, made by the best makers, and all in perfect working order; arrangements can be made for giving immediate possession, with agents, &c., as are now employed in the establishment. Ironworks are in the immediate vicinity, manufacturing every description of engine, forgings, boiler-plates, and bolt iron, &c.—Further particulars will be given on application to Mr. W. Longridge, 4, Mansion House-place, London; and Mr. Wm. Kirk, 24, Princess-street, Manchester.—February 28, 1853.

THE ENGINEERS, IRON SHIP BUILDERS, &c.—TO BE LET FOR A TERM OF YEARS, with power to purchase if desired, an ENGINEERING ESTABLISHMENT, one of the largest, and decidedly in the most ad-

vantageous situation in the United Kingdom for engine and iron ship building,

THE GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND.—Notice is hereby given, that the ANNUAL GENERAL COURT, or GENERAL MEETING of Proprietors of the above-named company, will be held at the London Tavern, Bishopsgate-street, in the City of London, on Thursday, the 7th day of April next, at Twelve o'clock at noon precisely, and that at such Court or Meeting an election will be had of three Assistants, in the place of P. F. Robertson, Esq., M.P., resigned, and of Andrew Bonar, Esq., Alfred Fowler, Esq., and George Gay, Esq., who retire by rotation, but who, being eligible for re-election, will offer themselves accordingly, and that such Court or Meeting will also be for the election of Auditors.

The transfer books of the company will be closed from Wednesday, the 23d inst., to Thursday, the 7th proximo, both inclusive.

By order of the Governor, Deputy-governor, and Assistants.

103 CHARLES FREWER, Secretary.

10, New Broad-street-mews, London, March 21, 1853.

CLEW BAY COPPER AND SULPHUR MINES.—The SECOND QUARTERLY MEETING of the shareholders of the Clew Bay Mining Company was held on Monday last, at the offices, King-William-street, Strand.

Mr. R. E. J. Smith, in the chair.

The directors' report stated that Captain Mates, the company's mining superintendent, had given in his weekly reports the most encouraging accounts of the richness and abundance of the copper and iron mines, as well as white quartz raised at the mines, and of the extent of the mineral field (upwards of 8000 acres), secured to the shareholders at large. The directors invited the shareholders to view the samples of ore now lying at the offices, that they might see and judge for themselves.

It was moved, seconded, and resolved:—

That the highly favourable report now read, be received, and entered in the cost-book.

That the accounts now submitted to the meeting be received, and entered in the cost-book.

The chairman announced to the meeting that a second assistant superintendent at the mines, from the Wicklow Copper Mines, was engaged, and about to proceed to Clew Bay, as co-juritor with Captain Mates.

The proceedings closed, with a vote of thanks to the chairman.

TREBURGET UNITED MINING COMPANY.—At a GENERAL MEETING of shareholders, held at the offices of the company, Bath, on Wednesday, the 16th March, 1853.

FERDINAND M. BALL, Esq., in the chair.

It was resolved:—

1. That the labour cost and bills, for the months of December, 1852, and of January and February, of the present year, amounting to 336. 14s. 6d., be allowed and passed.

2. That the code of rules and regulations recently prepared for the government of the Britannia Mining Company (subject to certain alterations rendered necessary by a difference of constitution), be also adopted by this company, and that a copy of the same shall be presented to each shareholder, and to every person hereafter becoming a shareholder.

3. That a call of 2s. 6d. per share be made, and to become payable on the 10th day of April next.

4. That the late committee be re-appointed, and that Mr. E. J. Smith, of Bath, be added thereto.

5. That the thanks of the meeting be given to the committee and officers of the company.

6. That the thanks of the meeting be given to the chairman for presiding.

THOMAS GOSSE, Sec.

THE DINAS GREAT COPPER MINE.—At a SPECIAL GENERAL MEETING of ADVENTURES, held at the offices, King William-street, City, on Wednesday, the 23d instant,

104 WILLIAM GARNER, Esq., in the chair.

The notice convening the meeting having been read, and also the minutes of the proceedings of a meeting held on the 9th instant, which were confirmed,

It was resolved unanimously:—

That Mr. Lelean be empowered to arrange with Mr. Webb, C.E., to furnish a specification and plans of the machinery necessary to be erected on the mine.

That Mr. Erron be instructed to make a survey of the mine, and to report upon it to the company.

That the allotment of the shares now on hand (about 3000) be made to the present shareholders *pro rata*.

That the endorsement and stamp on the original certificate being sufficient, the transfer of shares should not involve the necessity of issuing a new certificate.

That a call of 2s. 6d. per share be now made, according to the resolution adopted at the first meeting, and that such call be made at the offices of the company on or before the 15th April next.

Mr. Day proposed, and Mr. J. Winter seconded:—

That the thanks of the meeting were due to William Garner, Esq., for his conduct in the chair.—Carried unanimously.

QUARTZ ROCK MARIPOSA GOLD MINING COMPANY.—At the FIRST ORDINARY GENERAL MEETING of this company, held (in pursuance of the Deed of Settlement) at the London Tavern, Bishopsgate-street, on Saturday, the 19th instant,

105 The Right Hon. Lord ERSKINE in the chair.

The advertisement convening the meeting was read, and it was unanimously resolved:—

That this meeting do confirm and adopt the Directors' Report presented this day to the shareholders, and the accounts of the company as certified by the auditors, and that the same be printed and circulated.

That the Right Hon. Lord Erskine, and John Carter, Esq., Sheriff and Alderman, be re-elected directors of the Company.

That the sum of 10 guineas each be presented to Mr. Lewis Pocock and Mr. Henry Carr, for their services in auditing the accounts of the company.

That Mr. Lewis Pocock and Mr. Henry Carr be re-elected auditors for the ensuing year; and

That the thanks of this meeting are justly due, and that they be presented to the Chairman and Directors of this Company for their attention to the interests of the shareholders.

By order of the Board.

J. WADDELL, Sec.

EXTRACTION OF GOLD AND SILVER FROM THEIR ORES.—The NEW RAPID AMALGAMATOR (BAGGS'S PATENT) requires ONLY HALF the usual amount of MERCURY, and effects an enormous SAVING OF TIME in the process of AMALGAMATION. The NEW MERCURIAL SEPARATOR, secured under the same patent, effects a complete separation of the mercury from the refuse quartz, after the process of amalgamation is complete, in the space of a FEW SECONDS, instead of requiring, as at present, a tedious operation of some TWO HOURS.

In these machines, improved mechanical arrangements are aided by the most powerful chemical affinity, and from the principles introduced, it is next to impossible for a particle of gold to escape. The three following companies have already adopted these important improvements:—The Anglo-Californian Gold Mining Company, the Almaden Gold Mining Company, and the Anglo-Australian Gold Mining Company.

For terms of license, and other particulars, apply to Mr. Isham Baggs, Mining Journal office, 26, Fleet-street.

N.B.—An engraving of the machines, with descriptive letter-press, will appear in the Mining Journal almost immediately.

THE NEW STEAM STAMPS, FOR CRUSHING GOLD QUARTZ AND METALLIC ORES.—(BAGGS'S PATENT).

These powerful MACHINES are now TO BE HAD at a SHORT NOTICE, and of any number of horse-power, from four to twenty.—All communications to be addressed to Mr. ISHAM BAGGS, at the office of the Mining Journal, 26, Fleet-street, A 4-Horse Steam Stamp, complete, £130, royalty included, for cash, and other sizes at proportionate rates.

The following Testimonial of the power and efficacy of these engines is from the manager of one of the smelting establishments in South Wales, where steam stamps of moderate power, under this patent, have been used for some time in operation:—

TO ISHAM BAGGS, Esq., LONDON.

DEAR SIR.—In reply to your letter of inquiry about the action of your Patent Stamping Machine, I beg to say, that I have now had it fully at work for two months; the quantity of coarse metal it will crush with ease is about 20 tons in 10 hours; about two-thirds is crushed fine, the remainder would require to be stamped a second time, to reduce it to the same fineness. The steam used is very little, and the crushing force very great; when large lumps of the metal (which is very hard) are immediately broken down; when large, I mean lumps as big as ordinary paving stones, I am now putting up the second machine which you sent me, and have no doubt it will give (as the first has already done) entire satisfaction. I am quite convinced that the principle is excellent, and far superior to any other mode of crushing.

I am, yours, &c., ALFRED TRUEMAN.

Spitty Copper Works, Llanelli, July 23, 1852.

The patent stamps may be used with atmospheric pressure, through the medium of a water-wheel or other prime mover. The application is extremely simple, very powerful, and where a motive-prime is ready at hand, the machines cost less than when steam is employed.

TO GOLD COMPANIES, AND THE MINING WORLD GENE-

RALLY.—THE NEW STEAM STAMPS.—NOTICE.—One of these powerful

ENGINES HAS JUST BEEN ERECTED, and is NOW SET TO WORK, at the

ORE FLOORS and REDUCTION WORKS of Messrs. JOHNSON and MATTHEY,

SUFFERANCE WHARF, MILLWALL, POPLAR, where it may be seen in opera-

tion daily, and its powers subjected to any required test. These stamps, after the

most careful inspection, have already been adopted by the following companies:—

THE ENGLISH AND AUSTRALIAN COPPER COMPANY, THE ANGLO-CALIFORNIA GOLD MINING COMPANY, THE ALLIANCE GOLD MINING COMPANY, THE ANGLO-AUSTRALIAN GOLD MINING COMPANY, THE MEXICAN AND SOUTH-AMERICAN MINING COMPANY, THE ST. JOHN DEL REY (Gold, Brazil), THE LINARES LEAD MINING ASSOCIATION (Spain), THE LONDON and CALIFORNIA GOLD QUARTZ CRUSHING COMPANY. And they are about being adopted by several other companies and private individuals, who have carefully timed the results of their crushing powers, and submitted their capabilities to the most severe tests. In proof of the utility of these engines, it may be observed, that the saving in manual labour which they will effect to one company alone (the St. John del Rey) will amount to many thousand pounds sterling per annum.—For cards to view the engine at Millwall, apply, by letter, to Mr. Isham Baggs, Mining Journal office, 26, Fleet-street, London, where any further particulars may be obtained.

AGENTS.—LONDON—Mr. Richard Cooke, 7, Saxe-lane.

Messrs. Blundell, Spence, and Co., 9, Upper Thames-street.

MANCHESTER—Mr. James Douglas.

SUNDERLAND—Mr. John Young.

DEVONSHIRE AND CORNWALL—Mr. Richd. Penrose, Tavistock & Plymouth.

EDINBURGH AND EAST COAST OF SCOTLAND—Mr. William Bailey, Jun.,

Glasgow, Green-side-place, Edinburgh.

DUBLIN AND SOUTH OF IRELAND—Mr. John Hinshaw, Glasgow.

BELFAST—Messrs. William Stevenson, jun., and Co.

CAST-STEEL BORERS, suitable for BORING EVERY KIND OF ROCK.—Apply to J. T. Tregellas, 80, Lemon-street, Truro.

N.B. Correspondents from a distance should be particular in describing the nature of the rock for which the borers are intended. When the mines are situated within 5 miles of Truro, the advertiser instructs the smiths in person.

HOOPING-COUGH, ASTHMA, SORE THROATS, and COUGHS.—IMMEDIATELY CURED by CROSTHWAITE'S OCCULT LOZENGES.—They are perfectly innocent, being free from narcotics; one to three boxes cures the hooping-cough. Directions are enclosed, with the method of preparing them for infants.—Sold by Barclays, 95, Farringdon-street; Edwards, 67, and Newberry, 45, St. Paul's Church-yard; Sutton, Bow Church-yard; Prout, 229, Strand; Johnston, 68, Cornhill; Sanger, 150, and Hannay, 63, Oxford-street; and by all medicine dealers throughout the kingdom, in boxes 2s. 6d. each.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

NEW ARRANGEMENTS, AND REDUCED FARES AND FREIGHTS.

DEPARTURES OUTWARDS.

INDIA and CHINA, VIA EGYPT.—For Aden, Ceylon, Madras, Calcutta, Penang, Singapore, and Hong Kong, on the 4th and 20th of every month from Southampton; and on the 10th and 26th from Marseilles.

AUSTRALIA VIA SINGAPORE.—For Adelaide, Port Philip, and Sydney (touching at Batavia), on the 4th of May and 4th of every alternate month thereafter from Southampton; and on the 10th of May and 10th of every alternate month thereafter from Marseilles.

MALTA and EGYPT.—On the 4th and 20th of every month from Southampton; and on the 10th and 26th from Marseilles.

MALTA and CONSTANTINOPLE.—On the 27th of every month from Southampton.

SPAIN and PORTUGAL.—For Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, from Southampton, on the 7th, 17th, and 27th of every month.

CALCUTTA and CHINA.—Vessels of the Company ply occasionally (generally once a month) between Calcutta, Penang, Singapore, Hong Kong, and Shanghai.

N.B.—The rates of passage money and freight on the India and China lines have been considerably reduced, and may be had upon application at the Company's offices, 122, Leadenhall-street, London, and Oriental-place, Southampton.

M. R. G. F. MUNTZ'S (JUN.) PATENT SOLID BRASS TUBES.—13d. per lb., delivered in any part of the United Kingdom.—In introducing these tubes to the notice of engineers and the public, the patentee respectfully directs their attention to some of the advantages which they possess over those previously in use:—

1st. Economy in the first cost.—2d. Greater durability, being made of a mixture of metal hard in its own nature, and not mechanically hardened, as ordinary brass tubes are, which renders them liable to split or burst when subjected to the expansion and contraction caused by the heating and cooling of the boiler.—3d. Equality of hardness throughout, the metal being sufficiently tough to bear expanding, when fixing in the boilers, without softening the ends, which is necessary in fixing the brass tubes previously in use, and which causes the softened parts to wear more.—4th. They are less liable to corrode than any mixture of brass which can be manufactured into tubes by the process previously employed.

106 This is the first cost.—2d. Greater durability, being made of a mixture of metal hard in its own nature, and not mechanically hardened, as ordinary brass tubes are, which renders them liable to split or burst when subjected to the expansion and contraction caused by the heating and cooling of the boiler.—3d. Equality of hardness throughout, the metal being sufficiently tough to bear expanding, when fixing in the boilers, without softening the ends, which is necessary in fixing the brass tubes previously in use, and which causes the softened parts to wear more.—4th. They are less liable to corrode than any mixture of brass which can be manufactured into tubes by the process previously employed.

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THE MINING SHARE LIST.

Shares.	Paid.	Last Price.	Present.	Shares.	Paid.	Last Price.	Present.	Shares.	Paid.	Last Price.	Present.
5120 Alfred Consols (copper), Phillack	£2 16s	219	18 1/2	26 9 0	20	13	—	2000 North Tamar (silver-lead), cop.	1	1	—
1218 Alt-y-crib (silver-lead), Talybont, Wales	4	4	4	7 6	0	5	—	1200 N. W. Buller, or Gt. South Folgus	7s	8	—
2500 Anglesea Coal Company	4	4	4	10 0	0	2	—	1024 North Wh. Robert, Walkington	5s	9	—
1621 Ballewidden (tin), St. Just	11 1/2	103	11 0 6	0	2	—	3000 N. W. Unity (cop., tin), Gwin.	1s	3 1/2	—	
4800 Bedford United (copper), Tavistock	2 1/2	103	10 1/2	4 7 0	0	3	—	2000 Okehampton (cop., sil.-lead), Devon	1s	1 1/2	—
5000 Black Craig (lead), Kirkcudbrightshire	3	4 1/2	4 1/2	2 2 0	0	2	—	2048 Okel Tor (lead), Cornwall	1s	1	—
64 Boscombe Down (tin), St. Just	120	750	90 0	—	—	—	236 Old Wheal Basket, Illogan	4s	5	—	
100 Botallack (tin, copper), St. Just	182 1/2	810	85 10 0	15	0	—	236 Orsedd (lead), Flint	1s	2 1/2	—	
1000 Brynfall, Llanidloes, Montgomeryshire	7	6	6 5 0	6	3	—	2048 East Wheal Fortune, St. Hilary	2	2	—	
5000 Callington (lead, copper), Callington	£7 12s.	5 1/2	5 6	1 8 0	0	4	—	128 East Treusayne (tin), Gwinear.	5	12	—
1000 Carn Brea (copper, tin), Illogan	15	78	217 10 0	2	0	—	1000 East Trescoll	1	2 1/2	—	
128 Comford (copper), Gwennap, Cornwall	75	65	—	—	—	—	1024 East Wheal Fortune, St. Hilary	2	2	—	
236 Conduor (copper, tin), Camborne	20	123	123 1/2	28 0 0	3	0	—	1000 East Wheal Reeth, Lelant	3 1/2	1 1/2	—
2310 Cook's Kitchen (copper, tin), Illogan	15 1/2	3 1/2	—	—	—	—	4000 East Wheal Russell, Tavistock	2 1/2	18	15 17 1/2	
128 Cwmynt (lead), Cardiganshire	60	210	750 0 0	—	—	—	1000 East Wheal Vor (tin), Helston.	11 1/2	1 1/2	—	
1624 Devon Great Consols (copper), Tavistock	1	465	465	15 0 0	5	0	—	1000 East White Grit (lead), Salop.	10s. 6d.	2	—
672 Ding-Dong (tin), Gulval	5	6	55 0	12	—	—	1021 1/2 Exmoor Eliza (cop.), S. Moltons/150d.	6 1/2	—	—	
180 Dolcoath (copper, tin), Camborne	257 1/2	103	102 105	855 14 0	—	—	5000 Fox (tin, Wh. Virtue, St. Col.	11 1/2	3 1/2	4	
2360 Drake Walls (tin, copper), Calstock	7 1/2	9 1/2	—	—	—	2400 Fox Tor (tin), Altarnun	1	1	—		
800 East Darren (lead), Cardiganshire	28	110	4 0 0	2	0	—	1024 Freddi Llywd Mines, Wales.	1	1	—	
128 East Pool (tin, copper), Pool, Illogan	24 1/2	150	223 0 0	—	—	—	—	—	—	—	
94 East Wheal Croft (copper), Illogan	12 1/2	65	840 0 0	—	—	1000 Furdon Manor (cop.), S. Tawton	1	1	—		
128 East Wheal Rose (silver-lead), Newlyn	50	220	220 228 1/2	2245 0 0	10	0	—	4000 Gawton United	1	1	—
404 Fowey Consols (copper), Tavistock	40	50	—	—	—	—	600 Geillirhelin (sil.-lead), Cardigan.	1	3	—	
375 General Mining Co. for Ireland (cop., lead)	1 1/2	5 1/2	0 17 5	0	1 8	—	2400 Glenalun & Carilyveen (copper)	1	1	—	
2000 Goginan (lead), Cardiganshire, Wales	8	20	22 0 0	—	—	—	236 Glynn Wh. Mary, Cardigan.	1	1	—	
1024 Gomersal (copper), St. Cleer	12 1/2	15	15 1/2 16	0 7 6	0	7 0	—	1000 Golden Mile (lead), Glamorgan.	3 1/2	—	—
96 Great Consols (copper), Gwennap	1000	200	333 6 8	—	—	—	512 Great Rough Tor (cop.), Cornw.	37	12	—	
5000 Great Onslow Consols, Camelot	1 1/2	—	—	—	—	—	1024 Great Sheba Consols (tin, cop.)	12 1/2	12 1/2	12 1/2	
13750 Great Polgoon (tin), St. Austell	3	4 1/2	4 1/2	0 2 0	0	2 0	—	1000 Gt. Tregun Consols, Altarnun.	1	1	—
119 Great Work (tin), Germoe	100	170	170 175	156 10 0	7	10	—	6400 Great West Rosekar (cop.), Gwthian.	1	1	—
1024 Herd'sfoot (lead), near Liskeard	8 1/2	20	20	0 7 6	0	2 6	—	5000 Great Wheal Fortune (tin)	1	1	—
1000 Holm bush (lead, copper), Callington	25	21	25 0 0	—	—	—	6000 Great Wheal Tonkin (copper)	1	1	—	
2000 Holyford (copper), near Tipperary	11	7	3 5 0	0	5	0	20000 Gt. Wh. Vor (tin, cop.), Helston	1	1	—	
76 Jamaica (lead), Mold, Flintshire	31 1/2 6d.	3 1/2	224 0 0	—	—	—	10000 Gurney (tin), St. Erth	1	1	—	
756 Kirkcudbrightshire (lead), Kirkcudbright	9 1/2	4 1/2	0 15 0	0	10	0	10000 Hibernian (copper), Ireland	12 1/2	1 1/2	1 1/2	
1000 Lewis (tin, copper), St. Erth	17	10	2 0 0	0	10	0	10000 Hill Bridge Consols, Peter Tavy	1	1	—	
160 Levant (copper, tin), St. Just	2 1/2	155	103 0 0	2	0	—	5000 Hope Valley (lead), Shropshire.	1	1	—	
100 Lishburne (lead), Cardiganshire, Wales	75	1000	745 0 0	45	0	0	1024 Kenneggy (copper), Brengus.	5s. 2d.	5	—	
5000 Merlin (lead), Flint	2 1/2	5	1 6 0	0	4	—	4096 Lamerton United (cop.), Devon	1	1	—	
100 Miwr (lead), Flint	150 1/2	175	10 0 0	10	0	—	1024 Lantlack (sil.-lead), Landrake	3 1/2	1	—	
26000 Mining Co. of Ireland (copper, lead, coal)	7	18	18 1/2 1/2	8 1 0	0	7 0	—	6400 Michell (lead), Flint	1	1	—
200 North Pool (copper, tin), Pool	22 1/2	315	315	263 0 0	7	10	—	7300 Mixon Great Cons., Leek	1	1	—
149 North Roskar (copper), Camborne	10	180	175 180	240 10 0	3	0	—	1024 Morvah (lead), Flint	4 1/2	1 1/2	1 1/2
6000 North Wheal Bassett (copper, tin), Illogan	42 1/2	103 11 12	11 1 0 0	5	0	5	—	10000 North West Rosekar (cop.), Gwthian.	1	1	—
6400 Par Consols (copper), St. Blazey	1 1/2	20	19 20	22 16 0	0	15	0	100000 Padstow United Mines (tin, co.)	1	1	—
1150 Perran St. George (cop., tin), Perranzabuloe	21 1/2	40	15 0	10	0	—	1024 Trebarnval Porthcurno (lead)	2	4 1/2	3 1/2	
200 Phoenix (copper, tin), Linkinhorne	30	750	—	240 0 0	10	0	—	4096 Trebarnock (lead), St. T. Teath	4 1/2	1 1/2	1 1/2
1000 Polberri (tin), St. Agnes	15	13	4 5 0	1	0	—	—	2500 Trevan (lead), Illogan	1	1	—
5600 Providence Mines (tin), Uny Lelant	20 1/2	25	19 9 6	0	15	0	—	1024 Trebarnock, Treborth (lead)	1	1	—
1948 Rix Hill (tin), Tavistock	3 1/2	3 1/2	0 8 0	0	4	0	—	1024 Treborth (copper), St. Erth	1	1	—
23200 Rorrington (lead), Snailbeach, Shrewsbury	1	1 1/2	0 2 2	—	—	—	1024 Treborth, Treborth (lead)	1	1	—	
235 South Cadron (copper), St. Cleer	2 1/2	250	235 240	267 10 0	2	10	—	4096 Treborth (copper), Tavistock	4 1/2	1 1/2	1 1/2
9600 South Tamar (silver-lead), Beafers	1 1/2	8	7 3/8	0 15 0	0	5	—	2500 Treborth (lead), Treborth	1	1	—
256 South Tolgas (copper), Redruth, Cornwall	10	250	250	61 0 0	5	0	—	1024 Treborth (lead), Treborth	1	1	—
245 South Wheal Frances (copper), Illogan	37 1/2	200	190 185	217 15 0	6	0	—	1024 Treborth (lead), Treborth	1	1	—
1624 Spearins Consols (tin), St. Just, Cornwall	14	10 1/2	10 1/2	3 10 0	2	0	—	1024 Treborth (lead), Treborth	1	1	—
234 St. Aubyn and Grylls (copper, tin), Breage	3	7 1/2	0 17 6	0	7 6	—	1024 Treborth (lead), Treborth	1	1	—	
94 St. Ives Consols (tin), St. Ives	80	125	880 0 0	5	0	—	1024 Treborth (lead), Treborth	1	1	—	
1000 Stray Park and Camborne Vein (copper)	16	9	11 10 0	—	—	—	1024 Treborth (lead), Treborth	1	1	—	
5600 Tamar Consols (silver-lead), Beafers	4 1/2	40	4 11 0	2	0	—	1024 Treborth (lead), Treborth	1	1	—	
6000 Tamar (copper, tin), near Pool, Illogan	7	11 1/2	6 18 6	0	10	0	—	1024 Treborth (lead), Treborth	1	1	—
512 Trehane (silver-lead), Menheniot	2 1/2	25 1/2	15 12 6	1	0	—	1024 Treborth (lead), Treborth	1	1	—	
5000 Trelecons (copper), Redruth	6	2	1 3 0	0	5	0	—	1024 Treborth (lead), Treborth	1	1	—
96 Trevean (copper), Gwennap, Cornwall	32 1/2	200	4680 15 0	—	—	—	1024 Treborth (lead), Treborth	1	1	—	
120 Trevelyan and Barri (copper), Gwennap	52	14	492 10 0	—	—	—	1024 Treborth (lead), Treborth	1	1	—	
120 Treviskey and Barri (copper), Gwennap	130	99	295 10 0	2	10	0	—	1024 Treborth (lead), Treborth	1	1	—
100 Trumpet Consols (tin), near Helston	93	135	25 0 0	5	0	—	1024 Treborth (lead), Treborth	1	1	—	
400 United Mines (copper), Gwennap	40	400	412 1/2	23 15 0	10	0	—	1024 Treborth (lead), Treborth	1	1	—
1024 Wellington (copper, tin), Perranzabuloe	7 1/2	8	2 2 6	0	5	0	—	1024 Treborth (lead), Treborth	1	1	—
235 West Cadron (copper), Liskeard	20	350	335	206 5 0	8	0	—	1024 Treborth (lead			